GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MAGNETIC, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEAR

1923

UNDER THE DIRECTION OF
S. K. BANERJI, D.Sc.

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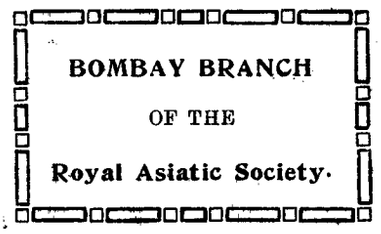

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INTRODUCTION.

The present volume on the magnetic, meteorological and seismographic observations made at the Government Observatories, Bombay and Alibag, during the year 1923 has been prepared in exactly the same form as the volume for 1922. It is the forty-fifth volume of its kind and extends the record of the meteorological and magnetic observations to a period of seventy-eight years and of seismographic observations to a period of twenty-five years. The transference of magnetic work from Colaba to Alibag in 1904, due to the city of Bombay having decided to have electric tram service, caused a certain amount of discontinuity in the magnetic records, which had run uninterruptedly at Colaba for about sixty years, but as comparative observations could be taken at both the stations for a period of two years before the electric tram lines were completed and the service had commenced its operations the ' discontinuity ' could be calculated and allowed for. The modified form of presenting the values of the principal meteorological and magnetic elements from day to day introduced in the volume for 1921 has been followed in the present volume. The bi-hourly values of the elements represent their momentary values at the end of every two hours of local mean time. It is obvious that a better representation of these elements, when they are rapidly fluctuating, would be obtained from the average values of these elements during every two hours or preferably every hour. But the Observatory had all along tabulated the momentary hourly values and the change had to be deferred till 1925 when satisfactory arrangements were made for the computation of the average values. With a view to economise printing charges, sanction was originally given to print only the bi-hourly values, but on the recommendation of the Observatories' Committee of the Royal Society, sanction has now been accorded to the printing of the hourly values of all the principal meteorological and magnetic elements. This imporant change will be introduced for the first time in the volume for 1924, which will make the publications of this Observatory fall in line with those issued by other similar institutions of the world.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Port of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea.

The astronomical co-ordinates giving the position of the Observatory adopted in the volumes for the year 1922 and earlier years were :—

Latitude	.. ..	18° 53′ 36″ North.
Longitude	.. ..	72° 48′ 56″ East.

Observations of wireless time signals from Eiffel Tower, Bordeaux and Nauen during the years 1925 and 1926 indicated that the adopted longitude of Bombay was not quite accurate. There are two stations within the Colaba Observatory compound of which the co-ordinates, as determined by the Survey of India, are as stated below :—

(1) *Colaba Observatory, Principal Station.*—This refers to the centre of the pillar under the dome of the Astronomical Observatory. The Astronomical Longitude of this point is 72° 48′ 54″ ·03 E (4 hrs. 51 m. 15·60 s.) and the Geodetic Co-ordinates are—

$$\lambda = 18° 53′ 46″ \cdot 51 \text{ N.}$$
$$\varphi = 72° 48′ 47″ \cdot 31 \text{ E.}$$

(2) *Colaba longitude station.*—The astronomical longitude of this point is 72° 48′ 55″ ·82 E, and the geodetic co-ordinates are—

$$\lambda = 18° 53′ 49″ \cdot 49 \text{ N.}$$
$$\varphi = 72° 48′ 49″ \cdot 10 \text{ E.}$$

By an unfortunate mistake the Observatory had hitherto ascribed the longitude of the ' longitude station ' to the ' astronomical dome.' This has recently been corrected and since then Bombay time has been showing better agreement with the European Wireless Time signals.

The Alibag Magnetic Observatory is situated on the mainland about 18 miles south-south-east of Bombay, and its adopted astronomical co-ordinates are—

Astronomical	..	Latitude 18° 38′ 17″ North.
		Longitude 72° 52′ 21″ East.

For a general description of the buildings and instruments in both the Observatories see " Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1916 to 1920."

Unless otherwise stated, all times given in this volume refer to the local mean time.

NOTICE.

As a result of the observations made during the years 1903 to 1925, the adopted value of log π^2 K for the standard magnetometer No. 7 has been changed from 3·40031 at 0° C, the value previously adopted, to 3·39984 at 0° C, for reasons explained on page 5 of this volume. When comparing the values of H and V published in this and subsequent volumes, with those published in previous volumes, the reader should correct the latter by the constant amounts -21γ and -10γ, respectively.

System of observation at Colaba.

Meteorological observations are taken every day, including Sundays, at the hours 6, 10, 14, 16 and 22 : the day, commencing at midnight (local time) is reckoned from 0 to 24. The time of observations of each element is fixed as indicated below and the observations are registered with strict punctuality.

From 5 minutes to the hour to 2 minutes after the hour.	Extent and description of clouds, state of the weather, occasional phenomena and direction of the wind.
At 2 minutes after the hour .	Thermograph standard thermometer, dry-bulb. Thermograph standard thermometer, wet-bulb.
At 3 minutes after the hour .	Newman's rain-gauge (in wet season).
From 5 minutes after the hour to 7 minutes after the hour.	Thermometer in ground, 1 inch deep. Thermometer in ground, 9 inches deep.
From 7 minutes after the hour to 9 minutes after the hour.	Newman's standard barometer No. 58 and attached thermometer. Newman's standard barometer No. 48 and attached thermometer.
At 10 minutes after the hour .	Thermometer attached to barograph.
At 19 minutes after the hour .	Surface thermometers in the sun, 1 and 8 inches deep.

The maximum and minimum thermometers in the thermometer shed, as also the solar radiation thermometer, are read twice daily at 8 and 16 hours.

Observations made once daily include readings of (1) the ground thermometers 20, 60 and 132 inches deep, made at 14 hours, and (2) the nocturnal radiation thermometer made at 8 hrs. During the monsoon months Newman's rain-gauge is read daily at midnight and the discharge of the syphon of the self-registering pluviograph are also read once or oftener as required. The electric clock controlling the drop of the time ball and the Harbour clock, is duly regulated thrice every day by comparison with the standard sidereal clock. Government chronometers, belonging to the Royal Indian Marine and Royal Navy Stores at the Observatory and those received from merchant ships in the harbour, are wound daily or twice a week as required and comparisons with the standard clock are made with sufficient frequency to render the instruments always ready for issue at call with well-determined rates.

Observations of pilot balloons for measurements of strengths and directions of upper air currents were started on the 25th April, 1923. The results of these observations will be included in the publications issued by the Upper Air Observatory, Agra.

Transit observations of stars for the determination of time for securing the errors and the rates of the sidereal clocks are made every Monday, Wednesday and Friday in the dry months of the year. During the monsoon months no opportunity is lost for observing either the sun or the stars whenever visible. The adjustment of the transit instrument in azimuth is tested frequently by reference to the fixed meridian collimator marks, and level errors are tested and checked once every month. Errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Observations of magnetic declination are made once every month at Colaba about the 15th of each month. Observations of declination made at the Colaba Observatory since the transfer of magnetic work to Alibag have recently been collected together and studied. The mean of the differences between the absolute values of declination at Colaba and Alibag furnished by these observations is 52′·8 and roughly agrees with the conclusion that, at Alibag, easterly declination stands higher by 53′·5 than at Colaba made originally on the result of 2 years comparative observations taken at the two stations and published on page *ii* of the Observatory Volume for the years 1906—1910.

System of observation at Alibag.

Eye observations of the instruments specified below are taken daily, Sundays included, at 6, 10, 14, 16 and 22 hours at the specified instants of time about the full hour of Greenwich mean time :—

At 19 minutes to the hour .	Kew Horizontal Force Magnetometer and attached thermometer.
„ 17 „ „ „ .	Kew Vertical Force Magnetometer and attached thermometer.
„ 15 „ „ „ .	Declination Magnetometer and thermometer in the Magnetometer room.

At	11	minutes	to	the hour	. Eschenhagen's Vertical Force Variometer and attached thermometer.
„	10	„	„	„	. Watson's Vertical Force Magnetograph and attached thermometer.
„	9	„	„	„	. Watson's Declination Magnetograph.
„	8	„	„	„	. Watson's Horizontal Force Magnetograph and attached thermometer.
„	7	„	„	„	. Eschenhagen's Horizontal Force Variometer and attached thermometer.
„	6	„	„	„	. Thermograph in the Magnetograph room and standard thermometer (read twice daily at 6 and 16 hours only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every week, as deflector at a distance of 100 cms. on the horizontal force magnetograph and at a distance of 75 cms. on the vertical force magnetograph, are made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 3 as deflector are made once a month for the purposes of check work and corresponding deflection experiments at the same distance are also made every month by the same deflector upon a magnet appropriately suspended over the pillar on the ground floor of the magnetometer tower.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cms. on the Eschenhagen's horizontal force variometer, and at a distance of 75 cms. on the Eschenhagen's vertical force variometer, are also made once a fortnight.

Observations of vibration and deflection for the determination of absolute horizontal force are made with the Observatory standard instrument No. 7 on Wednesdays and with the auxiliary instrument No. 3 with magnets belonging to magnetometer No. 137 on Mondays. With the same instruments observations of absolute declination are taken every Thursday. Observations of inclination are made with the Schulze's Inductor, which is the Observatory standard instrument, and another inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays. Each of the two inductor instruments is ordinarily observed on alternate days, but for check work both the instruments are observed simultaneously on Fridays.

Transit observations of stars for the determination of time are made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity is lost of observing the sun or stars whenever visible. The adjustments of the transit instruments are frequently tested by reference to the fixed collimator marks and by level observations; the residual errors of collimation, level and azimuth are determined once every month except during the monsoon months.

Meteorological instruments.

1. *Standard Barometer.*—The barometer is by Newman (No. 58) and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard and 0·012″ below the Calcutta hypothetical standard barometer. The height of the barometer is 37 feet above the mean sea-level.

2. *Barograph.*—The instrument is installed in the underground constant temperature room and the variation of pressure is recorded photographically. In accordance with a long-established practice, the tabulations have been made at 7 minutes after the full hour of the local mean time in order that the time may correspond to the instant for which the hourly normals have been calculated from past observations.

3. *Standard Dry bulb and Wet bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was found to have changed from 32°·6 to 33°·0 F. and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F. These thermometers were again tested on the 3rd February 1926 by the Director General of Observatories and the corrections of the thermometers were found to be the same as those determined in 1917.

4. *Photographic Dry bulb and Wet bulb Thermometers.*—The bulbs of these thermometers are placed in the same cage and close to those of the standard dry and wet bulb thermometers. The tabulations of the thermograms have been made at 2 minutes after the full hour of local mean time in order that the instant may agree with that of the hourly normals of temperature.

5. *Ground thermometers.*—These thermometers are installed in the standard thatched-shed with their bulbs at the depths of 1, 9, 20, 60 and 132 inches respectively below the

surface. Ground thermometers No. 3246 by Munro and No. 12689 by Casella are placed exposed to the sun in the rain-gauge enclosure with their bulbs at the depths of one inch and eight inches respectively below the surface. The thermometer No. 12689 was accidentally broken on 28th March 1925 and was replaced by thermometer No. 20930.

6. *Robinson-Beckley's Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley. It is erected on the old Time Ball Tower, at a height of 58 feet above the ground, and 100 feet above the mean sea-level. The centres of each pair of opposite hemi-spherical cups are four feet apart, and the diameter of each of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

7. *Dines' Anemometer.*—The head-vane has been placed on the old Time Ball Tower at a distance of 6 feet from Robinson Beckley's cups and 6 inches above their level. The comparison of this instrument with a U-tube pressure gauge, showed on the results of a series of experiments, that the relation between W, the difference in level of the water in inches in the two arms of the U-tube, which is a measure of the pressure of wind, and V, the velocity of wind in miles per hour as indicated in the Colaba Dines' chart, was $W = \cdot00078\ V^2$ instead of $W = \cdot00073\ V^2$, which should have been the correct relation if the instrument was in order and in perfect adjustment. The result showed that the Colaba Dines' instrument recorded only 96 per cent. of the true velocity.

The bi-hourly values of wind velocity tabulated in this volume represent the means of Beckley's readings (corrected by the factor 0·733) and the corresponding Dines' readings. The maximum and minimum values have been obtained from Dines' registrations. The directions of wind have been obtained from Beckley's; the daily mean directions have been derived by converting the hourly directions into N or S and E or W components and combining the mean components.

8. *Rain-gauge.*—Newman's rain-gauge, which has been in use since 1845, exposes for the collection of rain drops at a height of four feet above the ground a circular surface of an average diameter of 12·035 inches, forming the top of the funnel, which opens into a cylindrical vessel below having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05 inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

9. *Photographic Rain-gauge.*—A description of this instrument will be found in the introduction to the "Bombay Magnetical and Meteorological Observations, 1871 to 1878" page xlvi. For methods of reduction of pulviograph records, reference is made to the introduction to the "Bombay Magnetical, Meteorological and Seismographic Observations, 1916-20." The height of the receiving funnel of this instrument is 28 feet above the ground.

Magnetic Instruments.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. The variation of temperature in 1923 in the magnetograph room is shown below:—

Monthly and annual range in temperature (Fahrenheit).

1923.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Maximum .	83·0	83·4	86·6	89·0	91·0	91·6	90·0	84·7	85·7	87·4	87·3	85·1	91·6
Minimum .	82·0	82·0	82·5	86·6	88·7	89·5	84·6	83·6	84·0	85·5	85·1	84·0	82·0

Two Eschenhagen variometers, one for the horizontal force and the other for the vertical force, are also installed in the magnetograph room and are read every day at the hours already mentioned. A set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and Declination Magnetometer is installed in the ground-floor room of the magnetometer building and these are read every day at the hours already specified. The eye observations are regularly plotted and are used mainly for a comparative study of the performance of the different instruments. The magnetograms have been used in deducing the tabulated results except for a few short periods when the record was defective or missing, in which cases the missing hourly values are supplied from eye observations as far as they are available. The tabulations have been made at 51 minutes of

every hour instead of at the full hour in order that the instant may coincide with the full hour of Greenwich mean time.

The scale coefficients of the force magnetographs were obtained every fortnight from deflection observations performed on the instruments with deflectors, as already referred to, at a distance of 100 cms. in the case of H and at a distance of 75 cms. in the case of V magnetographs. The value adopted for any month is the mean of the mean observed value for that month and those for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs.

Instrument.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph	44·9	45·0	44·9	44·9	44·9	45·0	45·1	45·1	45·1	45·0	45·1	45·2
V. F. Magnetograph.	96·0	95·6	95·4	95·4	95·6	95·8	95·8	95·7	95·7 / 100·6 *	100·6	100·0	99·4

1 γ = ·00001 C. G. S.

The scale coefficient of the declination magnetograph for 1 cm. of ordinate is 10′·28.

The temperature coefficient for the horizontal force magnetograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. unit for 1° F. The temperature coefficient of the vertical force magnetograph was found in the same experiments to be practically *nil* as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effects.

Absolute Instruments.

Two magnetometers have been under observations regularly during the period. Magnetometer No. 7 by Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other instrument is Magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the tower of the magnetometer building, while instrument No. 3 is observed on the first floor, each instrument being permanently allowed to stand on its pillar on the respective floors.

Beginning from 1923 a revised table of log $\pi^2 K$ for magnetometer No. 7 (standard instrument), based on all observed values from 1903 to 1925 (comprising in all 117 double observations), has been brought into use in preference to the old adopted table. The value of log π^2 K at 0° C given in the Kew certificate (1901) is 3·39931. The value adopted hitherto, based on 23 observations taken in 1902, is 3·40031 at 0° C. The mean value given by the 117 double observations (1903-1925) is 3·39984 at 0° C. Each of these 117 observations, with the exception of 9 distributed over the period, gave a value of log π^2 K which was individually lower than the adopted value indicating that the adopted value was no longer tenable. The mean value given by the 117 observations was consequently considered more accurate and brought into use from 1923. The new table reduces the value of H by a constant amount of 21γ and of V by 10γ.

The value of the correction, $\text{Log}_{10}\left(1+\frac{P}{r^2}+\frac{Q}{r^4}\right)^{-1}$, used in the reduction of the horizontal force observations was obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The values of this correction for the different months of the year for the standard instrument at the deflection distance 22·5 cms. were as follows :—

January	.. 9·99317	May	.. 9·99307	September	.. 9·99307
February	.. 9·99315	June	.. 9·99306	October	.. 9·99319
March	.. 9·99308	July	.. 9·99306	November	.. 9·99326
April	.. 9·99305	August	.. 9·99306	December	.. 9·99320

Earth Inductor No. 41 by Schulze of Potsdam with galvanometer No. 200 by Plath are installed on specially constructed pillars in the room on the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building.

* Owing to the magnetograph building leaking badly during the heavy rains of 20th September 1923, some rain water entered the magnetograph enclosure and the instrument went completely out of adjustment. After adjustment on the 9th the scale coefficient was 100·6γ, and this gradually came down to the old value in a few months. By a slight alteration in the mechanism for modifying the sensitiveness, the instrument was made ten times more sensitive in 1927 with a scale coefficient of about 10γ only. Since the introduction of this change, the records have been showing in a remarkable manner all the variations in the V. F.—slow as well as quick—variations most of which the V. F. instruments were unable to pick up hitherto. A full description of this important step will be given in the volume for the year 1927.

General.

The southwest monsoon rains commenced at Bombay on the 12th June and ended on the 28th September. The total rainfall during the year amounted to 77·56″ and was 7·02″ above the normal of 72 years. The mean temperature of the year was 79°·6 F. which is 0°·3 above the normal. The greatest maximum temperature recorded was 95°·2 on the 12th March and the least minimum was 63°·6 on the 11th February. The mean temperatue of all the months in the year was within 2° of the normal of the season. The mean velocity of wind during the year was 6·0 miles per hour. The greatest daily mean velocity was 14·1 miles per hour on the 29th June and the lowest was 3·1 miles per hour on the 25th November. The greatest mean hourly velocity was 24 miles on the 20th September while the velocity of a single gust of wind as recorded by the Dines' anemometer reached 45 miles per hour on the 20th September.

The mean and the extreme values of the magnetic elements at Alibag during 1923 are given below along with the corresponding values for the previous two years :—

Year.	H						D						V						I
	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.
		Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.		
	γ	γ		γ		γ	′	′		′		′	γ	γ		γ		γ	° ′
1921	36935	37069	13th May.	36381	15th May.	688	15·9 ·E	41·9 ·E	15th May.	9·5 ·E	7th July.	32·4	17227	17320	15th May.	17144	20th Jany.	176	25 0·3
1922 .	36946	37037	10th Mar.	36777	14th Sept.	260	12·6 ·E	18·0 ·E	16th Feb.	6·6 ·E	31st Aug.	11·4	17293	17351	12th Aug.	17222	5th Apr.	129	25 5·0
1923 .	36985	37071	27th Novr.	36854	24th Mar.	217	8·9 ·E	13·6 ·E	26th Jan.	3·6 ·E	24th Sept.	10·0	17372	17432	3rd July	17270	25th Jany.	162	25 9·6

The value of H continued to rise at a generally increasing rate from the minimum in 1916 except in 1922, in which year the rise was of a smaller order. Declination diminished during the year at a rate which is very nearly the mean of the last ten years. Both the vertical force and the inclination showed, as usual, a gradual increase.

The following table gives the character figure assigned to each day according to the international scheme. In 1924, De Bilt issued a circular letter explaining a certain definite procedure to be followed in assigning a character figure to each day. The figures herein given have consequently been deduced from a study of the departure of each day's range from the normal range for the day supplemented by an eye examination of the magnetograms. They differ slightly from those previously supplied to and published by De Bilt, which were based merely on an eye examination of the curves.

Month.	"0" days.	"1" days.	"2" days.	Mean character figure.
1923.				
January . .	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 25, 26, 27, 28, 31.	13, 20, 21, 22, 23, 24, 29, 30 .	0	·26
February .	2, 5. 8, 9, 11, 12, 13, 15, 19, 20, 21, 22, 23, 24.	1, 3, 4, 6, 7, 10, 14, 16, 17, 18, 28.	25, 26, 27	·61
March . .	1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 17, 18, 19, 20, 21, 22, 23, 29, 30, 31.	7, 14, 15, 16, 25, 26, 27, 28 . .	24	·32
April . .	1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15, 16, 17, 18, 19, 25, 26, 27, 28, 29, 30.	10, 11, 12, 13, 20, 21, 22, 23, 24 .	0	·30
May . . .	1, 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31.	3, 8, 18, 19, 29, 30 . . .	17	·26
June . .	1, 2, 3, 7, 8, 9, 10, 16, 17, 18, 19, 20, 22, 23, 24, 25, 26, 28, 29.	4, 5, 6, 11, 12, 14, 15, 21, 27 .	13, 30	·43
July . .	1, 3, 4, 5, 8, 9, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 24, 25, 26, 28, 29, 30, 31.	2, 6, 7, 10, 11, 18, 23, 27 . .	0	·26
August . .	1, 2, 5, 7, 8, 9, 10, 11, 12, 14, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31.	3, 4, 6, 13, 15, 24, 25 . . .	0	·23
September .	2, 4, 5, 6, 7, 8, 12, 13, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25.	1, 3, 9, 10, 11, 14, 18, 26, 28, 29, 30.	27	·43
October . .	1, 2, 3, 4, 5, 6, 7, 8, 9, 13, 22, 23, 24, 25, 26, 28, 29, 30.	10, 11, 12, 14, 17, 18, 19, 20, 21, 27, 31.	15, 16	·48
November .	4, 5, 6, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 26.	1, 2, 3, 7, 12, 13, 21, 22, 27, 28, 29, 30.	0	·40
December .	1, 2, 3, 5, 6, 7, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 29, 30, 31.	4, 8, 9, 14, 23, 25, 27, 28 . .	24, 26	·39

The year was on the whole quieter than the previous ten years as was to be expected being associated with the minimum number of sunspots. February was the most active and August the most inactive month in the year.

Absolute observations and Base Line Values.

Declination.

Absolute observations of declination were made once a week with both the magnetometers No. 7 and No. 3, one after the other.

Base-line values are derived by converting the ordinates corresponding to absolute observations with instrument No. 7 into angles and subtracting the converted ordinates from the observed absolute easterly declination. The values so obtained of the base-lines of the declination magnetograph denote westerly declination. Owing to a gradual decrease in the easterly declination, the declination curve had come very near to the base-line and consequently the magnetograph was adjusted on the 14th February 1923. The base-line which was below the curve was shifted above and as a result of this adjustment the values of the base-lines obtained by the process indicated above, which previously denoted westerly declination, represented easterly declination after the shift.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination base-line values, 1923.

(0° *plus* tabular minutes.)

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	′	′		′	′		′	′
January 4 .	6·0 W	6·3 W	May 3 .	38·6 E	38·5 E	September 6 .	39·5 E	39·7 E
„ 11 .	6·1	6·3	„ 10 .	38·4	38·4	„ 13 .	39·2	39·3
„ 18 .	6·6	6·5	„ 17 .	38·3	38·5	„ 21 .	39·5	39·2
„ 25 .	6·4	6·5	„ 24 .	38·5	38·5	„ 27 .	38·6	39·0
February 1 .	6·6	6·6	„ 31 .	38·6	38·6	October 4 .	39·1	38·9
„ 8 .	6·7	6·7	June 7 .	38·6	38·7	„ 11 .	38·3	38·7
			„ 14 .	38·8	38·7	„ 18 .	38·9	38·7
„ 15 .	39·5 E	39·5 E	„ 21 .	39·0	38·8	„ 25 .	38·7	38·7
„ 22 .	39·4	39·2	„ 28 .	38·8	38·9	November 1 .	38·8	38·7
March 1 .	38·8	38·9	July 5 .	39·0	38·9	„ 8 .	38·6	38·7
„ 8 .	38·5	38·6	„ 12 .	38·8	39·1	„ 15 .	38·4	38·8
„ 15 .	38·1	38·5	„ 19 .	39·2	39·3	„ 22 .	39·0	38·7
„ 22 .	38·0	38·5	„ 26 .	39·7	39·5	„ 29 .	39·0	38·7
„ 29 .	39·1	38·5	August 2 .	39·8	39·8	December 6 .	38·4	38·8
April 5 .	38·9	38·7	„ 9 .	40·0	40·0	„ 13 .	38·5	38·6
„ 12 .	38·7	38·8	„ 16 .	40·1	40·0	„ 20 .	38·9	38·4
„ 19 .	38·8	38·7	„ 23 .	40·3	40·0	„ 27 .	37·9	38·3
„ 26 .	38·4	38·6	„ 30 .	39·8	39·8			

Horizontal Force.

Absolute observations of horizontal intensity were made twice a week, on Mondays with instrument No. 3 and on Wednesdays with instrument No. 7. A day's observations comprise a double set of vibration and deflection observations at three distances, which for No. 7 are 22·5 cms., 30 cms. and 40 cms. In calculating the base-line values the mean of the observed values at all the three distances has been adopted.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 expressed in γ and subtracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to a uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking over-lapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Horizontal force base-line values at 85° F., 1923.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 3	36710	36704	May 2	36723	36719	September 5	36717	36718
„ 10	704	705	„ 9	707	720	„ 12	717	717
„ 17	709	708	„ 16	723	720	„ 19	723	716
„ 24	709	709	„ 23	723	721	„ 26	711	716
„ 31	709	710	„ 30	726	726	October 3	714	717
February 7	714	709	June 6	728	728	„ 10	715	714
„ 15	711	710	„ 13	729	728	„ 17	719	714
„ 21	699	711	„ 20	731	727	„ 24	709	714
„ 28	717	712	„ 27	725	726	„ 31	713	714
March 7	713	714	July 4	721	726	November 7	715	712
„ 14	719	717	„ 11	723	725	„ 14	713	712
„ 21	719	717	„ 18	731	726	„ 21	709	712
„ 28	715	720	„ 25	727	725	„ 28	711	713
April 4	719	719	August 1	727	725	December 5	711	712
„ 11	725	721	„ 8	719	722	„ 12	718	713
„ 18	719	722	„ 15	720	720	„ 19	713	713
„ 25	725	720	„ 22	719	718	„ 26	711	711
			„ 29	715	717			

Vertical Force.

Dip observations were made every day in the year, with the exception of Sundays and holidays, each of the two inductor instruments being observed on alternate days.

Base-line values are derived by expressing the mean ordinates of V. F. magnetograms corresponding to the inclination observation in γ's and subtracting the converted ordinate from the absolute vertical force derived from the inclination observation. Values derived from Inductor No. 108 are reduced to those derived from Inductor No. 41 (which is the Observatory standard) by applying the mean correction for the month deduced from the comparative observations taken once a week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by interpolation.

The vertical force magnetograph was adjusted on 3rd and 4th July, and 22nd September.

Changes of base-line values occurred as follows:—

Date.	Hour.	Amount.	Cause.
		γ	
February 17	9—10	+7	Dislocation of magnet.
July 3	10—11	+105	Adjustment of V. F. magnetograph.
„ 4	9—10	+279	Do. do.
September . . . . . 20—22	—	—67	Do. do.

Vertical force base-line values, 1923.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 3 .	16570	16572	May 2 .	16524	16518	September 5 .	16919	16913
„ 10 .	590	602	„ 9 .	520	519	„ 12 .	892	903
„ 17 .	644	620	„ 16 .	530	533	„ 19 .	926	917
„ 24 .	590	600	„ 23 .	518	527	„ 26 .	849	849
„ 31 .	590	609	„ 30 .	526	527	October 3 .	872	855
February 7 .	638	611	June 6 .	544	534	„ 10 .	845	862
„ 14 .	571	605	„ 13 .	548	527	„ 17 .	879	859
„ 21 .	607	601	„ 20 .	534	533	„ 24 .	822	838
„ 28 .	598	595	„ 27 .	566	544	„ 31 .	862	864
March 7 .	636	618	July 6 .	912	920	November 6 .	873	869
„ 14 .	626	606	„ 11 .	942	932	„ 14 .	839	852
„ 21 .	568	580	„ 18 .	945	944	„ 21 .	864	880
„ 28 .	573	568	„ 25 .	955	952	„ 28 .	931	913
April 4 .	550	558	August 1 .	962	958	December 5 .	881	888
„ 11 .	539	541	„ 8 .	949	951	„ 12 .	865	882
„ 18 .	556	533	„ 15 .	931	933	„ 19 .	904	890
„ 25 .	502	525	„ 22 .	952	935	„ 26 .	883	878
			„ 29 .	932	924			

Seismographs.

An Omori-Ewing Seismograph (E-W component) and a locally constructed seismograph (N-S and E-W components) were kept in continuous operations. A Milne-Shaw Seismograph was installed in the underground constant temperature room on 7th May 1923 in the N-S direction. The instrument has given very satisfactory records of earthquakes and microseisms since its installation. The earthquakes recorded by the Omori instrument for the period January to June and by Milne-Shaw Seismograph for the period July to December will be found tabulated on pages 68—71.

Magnetic Storms.

In plates I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base line values and scale co-efficients are shown with each curve. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich mean time. Increasing ordinates for H. F. and V. F. curves mean increase in force and for the declination curves decrease in angle towards the east.

S. K. BANERJI,
Meteorologist, Bombay.

Colaba Observatory;
The 1st February 1928.

BI-HOURLY VALUES OF BAROMETRIC PRESSURE, 1923.

JANUARY. (IN INCHES OF MERCURY AT 32° F.).

Date.	Hours.†												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	30·010	29·984	29.986	30.013	30.074	30.082	30.017	29.952	29.938	29.944	29.974	29.989	**29·995**
2	29·972	·954	·950	29.981	.031	.043	29.995	.931	.915	.928	.968	.973	.970
3	·966	·928	·914	.928	29.974	29.992	.943	.894	.878	.894	.931	.950	.932
4	·939	·909	·889	.897	.952	.967	.926	.876	.876	.897	.950	.968	.920
5	·935	·907	·903	.918	.967	.993	.944	.885	.881	.908	.959	.973	.931
6	·949	·919	·902	·921	·973	·986	·935	·873	·859	·893	·937	·945	·924
7	·931	·909	·899	·919	·979	·987	·941	·885	·857	·881	·933	·937	·922
8	·913	·899	·878	·899	·953	·957	·891	·834	·837	·863	·911	·918	·895
9	·896	·887	·880	·914	·962	·978	·926	·857	·855	·893	·936	·938	·911
10	·917	·887	·873	·907	·956	·956	·899	·858	·839	·872	·923	·938	·901
11	·920	·893	·869	·894	·942	·943	·870	·818	·804	·829	·876	·884	**·878**
12	·877	·866	·867	·903	·957	·971	·918	·857	·846	·867	·905	·920	·896
13	·913	·883	·883	·901	·943	·946	·889	·848	·849	·873	·919	·935	·899
14	·921	·891	·867	·891	·943	·959	·892	·843	·845	·865	·907	·909	·894
15	·904	·886	·876	·900	·952	·980	·926	·875	·882	·906	·939	·956	·917
16	·942	·922	·910	·943	·987	30·011	·952	·916	·908	·938	·971	·985	·950
17	·974	·937	·937	·969	30·007	·010	·958	·903	·895	·915	·943	·944	·948
18	·939	·929	·923	·943	29·989	·000	·946	·889	·885	·904	·947	·943	·937
19	·935	·921	·910	·921	·951	29·949	·903	·849	·859	·897	·927	·919	·911
20	·913	·888	·889	·919	·977	·998	·936	·881	·885	·919	·959	·970	·928
21	·953	·945	·952	·973	30·022	30·031	·983	·923	·920	·950	·989	·987	·969
22	·956	·942	·932	·962	·004	·016	·940	·871	·860	·880	·920	·920	·933
23	·911	·873	·877	·895	29·939	29·963	·911	·855	·861	·893	·929	·943	·905
24	·924	·900	·886	·920	·970	·985	·940	·874	·874	·902	·946	·958	·923
25	·929	·910	·904	·927	·976	·996	·947	·898	·894	·910	·960	·980	·937
26	·960	·929	·906	·951	·997	30·020	·978	·910	·901	·909	·946	·966	·948
27	·955	·919	·900	·923	·970	29·987	·938	·866	·851	·881	·921	·946	·922
28	·936	·912	·913	·941	·989	30·010	·972	·916	·904	·927	·972	·989	·949
29	·976	·957	·941	·963	30·016	·041	·995	·930	·915	·938	·972	·977	·968
30	·967	·932	·929	·947	29·986	·010	·966	·901	·891	·903	·936	·958	·944
31	·949	·925	·915	·935	·973	29·990	·942	·893	·880	·899	·945	·963	·934
Mean ..	29·938	29·914	29·905	29·930	29·978	29·992	29·939	29·883	29·876	29·899	29·940	29·951	29·929

Highest hourly value during January .. 30·090
Lowest do. do. .. 29·804

FEBRUARY.

1	29·949	29·931	29·917	29·947	29·993	30·017	29·964	29·905	29·900	29·916	29·948	29·938	29·943
2	·929	·925	·924	·946	·985	·010	·940	·892	·875	·874	·908	·924	·926
3	·901	·880	·869	·905	·950	29·974	·926	·868	·860	·881	·920	·949	·908
4	·927	·888	·876	·909	·945	·956	·891	·828	·822	·839	·888	·910	·890
5	·895	·892	·878	·906	·950	·962	·903	·833	·819	·838	·879	·903	·888
6	·884	·862	·861	·893	·927	·940	·880	·802	·788	·810	·840	·847.	·860
7	·825	·808	·801	·832	·879	·887	·837	·790	·795	·824	·863	·879	·836
8	·855	·827	·835	·869	·917	·939	·883	·847	·853	·894	·933	·944	·884
9	·924	·898	·899	·924	·965	·971	·943	·887	·876	·904	·936	·941	·922
10	·922	·891	·888	·906	·924	·951	·914	·838	·814	·829	·868	·892	·885
11	·861	·823	·817	·841	·889	·893	·846	·775	·763	·786	·822	·856	**·830**
12	·834	·808	·788	·824	·868	·888	·844	·792	·788	·815	·850	·859	·830
13	·853	·825	·817	·837	·884	·902	·858	·802	·778	·805	·843	·846	·837
14	·839	·808	·789	·820	·868	·906	·863	·810	·808	·827	·858	·872	·839
15	·862	·840	·826	·855	·912	·933	·899	·842	·849	·882	·930	·945	·883
16	·923	·900	·885	·921	·970	·998	·957	·906	·901	·922	·943	·945	·931
17	·937	·920	·914	·933	·976	·986	·929	·873	·852	·875	·907	·919	·918
18	·913	·874	·871	·901	·923	·939	·897	·835	·820	·848	·880	·893	·882
19	·882	·863	·873	·911	·965	·997	·953	·888	·875	·887	·928	·943	·915
20	·924	·882	·869	·895	·929	·956	·914	·867	·844	·862	·876	·890	·891
21	·864	·839	·840	·871	·911	·932	·891	·845	·829	·850	·881	·889	·870
22	·868	·827	·825	·854	·900	·922	·890	·856	·854	·872	·903	·916	·875
23	·907	·869	·869	·906	·972	30·005	·977	·935	·935	·958	·990	30·004	·946
24	·996	·970	·967	·998	30·035	·039	·997	·958	·942	·945	·980	·006	**·986**
25	·981	·950	·949	·981	·016	·023	·980	·914	·887	·897	·929	29·943	·953
26	·929	·893	·887	·919	29·976	29·997	·957	·893	·869	·893	·927	·938	·923
27	·921	·911	·913	·943	·995	30·013	·959	·908	·887	·919	·968	·981	·945
28	·967	·930	·916	·940	·994	·003	·963	·917	·894	·915	·973	·994	·951
Mean ..	29·903	29·876	29·870	29·900	29·943	29·962	29·916	29·861	29·849	29·870	29·906	29·920	29·898

Highest hourly value during February .. 30·042
Lowest do. do. .. 29·758

*Derived from 24 hourly values.

† The readings refer to 7 minutes after the full hour of local mean time (*vide* Introduction, page 3.)

MARCH. (IN INCHES OF MERCURY AT 32° F.).

Date.	Hours.†												Mean*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·981	29·945	29·932	29·968	30·013	30·034	29·996	29·940	29·923	29·937	29·979	29·999	29·971
2	·974	·946	·941	·968	·032	·045	·993	·941	·916	·936	·976	·996	**·973**
3	·975	·943	·936	·959	29·991	·014	·966	·900	·856	·873	·914	·947	·939
4	·934	·900	·889	·916	·953	29·978	·939	·883	·851	·855	·899	·939	·910
5	·905	·864	·844	·876	·927	·956	·913	·836	·820	·848	·908	·923	·884
6	·904	·874	·880	·915	·971	30·002	·968	·908	·884	·904	·955	·980	·930
7	·970	·938	·935	·973	30·016	·038	·992	·929	·902	·925	·970	·986	·965
8	·967	·942	·945	·976	·010	·021	·980	·924	·918	·932	·973	·992	·965
9	·965	·925	·913	·943	29·970	29·983	·934	·868	·828	·869	·898	·890	·914
10	·861	·842	·840	·883	·914	·928	·884	·840	·820	·836	·875	·902	·870
11	·888	·865	·861	·905	·959	·972	·941	·886	·868	·891	·935	·963	·913
12	·947	·903	·893	·939	·987	·994	·945	·882	·856	·889	·937	·964	·929
13	·945	·894	·872	·892	·941	·940	·891	·825	·799	·815	·860	·878	·878
14	·847	·809	·809	·834	·879	·894	·842	·784	·767	·780	·813	·832	·824
15	·823	·806	·807	·842	·892	·922	·883	·847	·834	·854	·903	·927	·864
16	·914	·891	·902	·934	·979	·991	·941	·875	·849	·873	·902	·918	·914
17	·907	·870	·869	·888	·932	·933	·882	·810	·772	·787	·819	·834	·856
18	·823	·794	·788	·820	·864	·875	·846	·796	·776	·803	·869	·895	·831
19	·889	·887	·886	·927	·969	·987	·956	·897	·863	·875	·933	·946	·919
20	·938	·917	·904	·950	·986	·984	·950	·897	·866	·884	·905	·915	·925
21	·898	·870	·870	·909	·934	·948	·894	·833	·805	·813	·837	·872	·873
22	·871	·849	·868	·876	·916	·916	·872	·808	·788	·820	·860	·884	·860
23	·859	·843	·861	·893	·939	·941	·911	·853	·845	·866	·921	·929	·889
24	·885	·862	·840	·903	·948	·950	·898	·836	·803	·821	·878	·894	·877
25	·876	·854	·832	·865	·903	·910	·864	·806	·789	·817	·845	·872	·853
26	·857	·803	·812	·833	·875	·884	·838	·783	·746	·780	·827	·847	·824
27	·855	·826	·814	·838	·877	·888	·841	·778	·749	·777	·813	·835	·822
28	·830	·803	·794	·828	·876	·880	·838	·766	·741	·775	·793	·837	·815
29	·830	·818	·810	·839	·877	·890	·846	·775	·726	·742	·789	·817	·813
30	·802	·774	·780	·817	·859	·863	·820	·755	·717	·735	·783	·827	**·793**
31	·804	·786	·792	·814	·861	·873	·830	·761	·727	·758	·804	·842	·804
Mean ..	29·894	29·866	29·862	29·894	29·937	29·949	29·906	29·846	29·819	29·841	29·883	29·906	29·884

Highest hourly value during March .. 30·046
Lowest do. do. .. 29·717

APRIL.

1	29·816	29·792	29·795	29·830	29·865	29·873	29·840	29·780	29·741	29·784	29·824	29·851	29·815
2	·849	·839	·835	·861	·903	·914	·869	·809	·786	·825	·856	·865	**·851**
3	·851	·830	·824	·837	·901	·899	·856	·796	·769	·786	·822	·838	·833
4	·817	·803	·815	·848	·883	·881	·839	·772	·766	·784	·841	·860	·827
5	·843	·810	·802	·821	·869	·865	·821	·772	·744	·773	·815	·830	·814
6	·817	·805	·802	·833	·885	·863	·823	·765	·740	·774	·821	·851	·815
7	·838	·822	·817	·833	·871	·880	·832	·777	·753	·768	·798	·824	·817
8	·818	·799	·809	·834	·885	·875	·828	·779	·746	·858	·809	·825	·813
9	·804	·801	·787	·811	·851	·846	·812	·744	·718	·740	·794	·793	·791
10	·781	·763	·764	·787	·820	·811	·790	·738	·707	·718	·759	·786	·768
11	·769	·739	·738	·763	·803	·818	·778	·720	·696	·728	·760	·777	·758
12	·746	·713	·690	·729	·770	·775	·739	·671	·653	·673	·715	·747	·718
13	·737	·710	·696	·730	·766	·752	·713	·654	·636	·660	·696	·742	**·708**
14	·737	·710	·716	·729	·759	·764	·729	·687	·665	·689	·736	·775	·726
15	·761	·734	·728	·754	·797	·804	·773	·722	·694	·713	·761	·792	·753
16	·787	·765	·745	·767	·801	·795	·759	·685	·651	·663	·697	·735	·736
17	·726	·696	·688	·729	·761	·768	·734	·680	·655	·680	·732	·756	·718
18	·733	·713	·712	·749	·799	·807	·793	·748	·718	·746	·778	·799	·759
19	·778	·761	·751	·777	·821	·820	·793	·743	·702	·703	·725	·755	·760
20	·751	·727	·717	·747	·801	·805	·767	·717	·681	·697	·718	·739	·738
21	·720	·707	·710	·748	·778	·776	·758	·713	·692	·715	·750	·778	·738
22	·759	·743	·763	·811	·847	·843	·806	·734	·712	·732	·773	·783	·776
23	·751	·731	·733	·780	·824	·837	·798	·742	·720	·731	·757	·753	·764
24	·747	·724	·732	·774	·807	·807	·785	·740	·721	·748	·788	·809	·766
25	·800	·773	·768	·801	·838	·838	·795	·741	·720	·757	·795	·821	·788
26	·806	·796	·795	·818	·852	·850	·817	·760	·738	·765	·804	·814	·801
27	·793	·774	·777	·805	·845	·847	·815	·762	·737	·760	·797	·805	·792
28	·777	·736	·726	·746	·779	·786	·753	·694	·676	·696	·736	·746	·736
29	·728	·697	·701	·727	·776	·788	·762	·706	·693	·715	·743	·764	·734
30	·745	·719	·716	·752	·809	·825	·810	·761	·745	·758	·793	·809	·771
Mean ..	29·779	29·758	29·755	29·784	29·826	29·827	29·793	29·737	29·713	29·735	29·773	29·794	29·773

Highest hourly value during April .. 29·920
Lowest do. do. .. ·636

*Derived from 24 hourly values.
† The readings refer to 7 minutes after the full hour of local mean time (*vide* Introduction, page 3.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.†												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·793	29·774	29·759	29·784	29·826	29·838	29·821	29·776	29·751	29·768	29·800	29·826	29·793
2	·807	·774	·750	·764	·796	·795	·775	·725	·706	·730	·764	·793	·764
3	·776	·741	·743	·765	·796	·801	·777	·727	·711	·728	·766	·792	·760
4	·770	·744	·745	·765	·805	·817	·799	·766	·741	·761	·798	·820	·778
5	·791	·774	·778	·806	·833	·833	·805	·774	·767	·786	·815	·838	·801
6	·818	·788	·786	·816	847	·856	·836	·794	·777	·798	·833	·854	·818
7	·833	·805	·808	·832	·868	·869	·839	·798	·781	·797	·831	·839	·824
8	·809	·777	·776	·804	·843	·847	·821	·765	·749	·759	·782	·781	·791
9	·763	·727	·724	·755	·792	·800	·773	·726	·687	·709	·751	·771	·748
10	·755	·747	·745	·789	·836	·833	·807	·775	·741	·766	·811	·829	·787
11	·811	·784	·801	·844	·883	·883	·848	·801	·774	·780	·812	·832	·821
12	·814	·778	·772	·797	·824	·842	·815	·766	·757	·763	·776	·790	·790
13	·778	·745	·735	·775	·803	·818	·796	·758	·732	·743	·763	·785	·769
14	·756	·728	·731	·743	·791	·820	·809	·772	·736	·754	·778	·795	·768
15	·786	·756	·751	·778	·821	·839	·833	·793	·774	·787	·817	·837	·798
16	·821	·794	·789	·807	·851	·874	·857	·817	·780	·785	·807	·820	·817
17	·810	·790	·781	·795	·829	·837	·804	·756	·712	·725	·761	·784	·781
18	·761	·748	·742	·758	·790	·795	·781	·745	·723	·728	·764	·771	·758
19	·762	·740	·736	·756	·786	·788	·748	·703	·682	·691	·713	·744	·737
20	·729	·719	·733	·754	·787	·789	·773	·735	·707	·721	·759	·787	·750
21	·786	·763	·766	·806	·853	·863	·851	·822	·805	·804	·840	·870	·821
22	·851	·828	·818	·833	·860	·858	·834	·788	·754	·772	·800	·820	·817
23	·791	·747	·754	·791	·803	·788	·760	·722	·683	·691	·702	·722	·744
24	·723	·697	·715	·757	·785	·793	·781	·727	·697	·709	·719	·723	·735
25	·715	·695	·700	·756	·792	·793	·759	·717	·684	·692	·736	·755	·733
26	·761	·750	·764	·798	·853	·856	·821	·780	·749	·794	·807	·802	·795
27	·780	·775	·782	·809	·848	·840	·806	·736	·700	·700	·725	·762	·772
28	·753	·752	·744	·765	·794	·801	·777	·722	·682	·687	·697	·714	·740
29	·694	·659	·651	·672	·707	·713	·689	·643	·611	·614	·642	·668	·662
30	·661	·639	·645	·677	·728	·742	·736	·694	·654	·659	·680	·702	·686
31	·684	·656	·641	·674	·707	·724	·713	·675	·635	·635	·670	·687	·675
Mean ..	29·772	29·748	29·747	29·775	29·811	29·818	29·795	29·752	29·724	29·737	29·765	29·784	29·769

Highest hourly value during May .. 29·887
Lowest do. do. .. ·611

JUNE.

1	29·672	29·646	29·655	29·701	29·749	29·754	29·733	29·690	29·658	29·663	29·688	29·702	29·693
2	·700	·668	·673	·706	·743	·755	·739	·697	·657	·649	·682	·703	·698
3	·705	·689	·693	·708	·745	·755	·736	·705	·669	·675	·696	·711	·707
4	·691	·667	·673	·697	·732	·735	·719	·689	·658	·666	·701	·718	·696
5	·702	·682	·692	·724	·755	·775	·758	·728	·707	·723	·749	·758	·731
6	·737	·703	·709	·733	·763	·774	·766	·737	·705	·721	·751	·773	·741
7	·758	·726	·715	·742	·768	·780	·765	·730	·710	·718	·747	·764	·744
8	·761	·748	·752	·774	·801	·809	·794	·756	·724	·738	·755	·774	·766
9	·754	·735	·737	·767	·792	·808	·788	·754	·730	·744	·769	·779	·763
10	·762	·730	·725	·747	·772	·773	·757	·725	·695	·706	·731	·737	·738
11	·714	·670	·657	·671	·685	·676	·649	·604	·600	·622	·659	·663	·654
12	·642	·595	·592	·609	·633	·641	·624	·597	·557	·591	·619	·634	·611
13	·620	·582	·564	·629	·673	·685	·668	·637	·629	·636	·676	·690	·642
14	·679	·662	·658	·688	·724	·731	·726	·698	·683	·704	·734	·755	705
15	·752	·728	·725	·749	·793	·799	·790	·760	·725	·743	·776	·800	·762
16	·786	·757	·759	·777	·808	·708	·789	·748	·718	·725	·753	·770	·762
17	·758	·727	·714	·736	·751	·761	·748	·715	·675	·667	·682	·690	·718
18	·675	·636	·627	·643	·660	·669	·657	·627	·606	·621	·646	·660	·643
19	·636	·615	·604	·633	·666	·676	·650	·634	·615	·620	·654	·678	·641
20	·659	·638	·637	·662	·683	·688	·675	·658	·639	·638	·662	·684	·661
21	·667	·635	·634	·651	·684	·698	·685	·654	·627	·633	·650	·668	·657
22	·664	·636	·632	·651	·689	·684	·666	·637	·625	·635	·658	·665	·655
23	·661	·628	·630	·655	·690	·697	·686	·668	·649	·660	·677	·695	·667
24	·683	·658	·651	·672	·709	·718	·697	·677	·651	·651	·684	·696	·679
25	·680	·654	·651	·673	·707	·713	·696	·670	·657	·675	·701	·715	·683
26	·699	·663	·664	·687	·711	·723	·705	·683	·664	·684	·722	·733	·695
27	·715	·692	·671	·693	·720	·718	·713	·681	·649	·652	·679	·699	·690
28	·687	·650	·641	·666	·686	·694	·688	·658	·627	·630	·656	·675	·662
29	·665	·641	·628	·645	·668	·682	·669	·643	·607	·618	·640	·660	·648
30	·642	·613	·596	·623	·643	·656	·624	·600	·577	·612	·644	·636	·621
Mean ..	29·698	29·669	29·665	29·690	29·720	29·725	29·712	29·682	29·656	29·667	29·695	29·709	29·691

Highest hourly value during June .. 29·814
Lowest do. do. .. ·557

*Derived from 24 hourly values.
† The readings refer to 7 minutes after the full hour of local mean time (*vide* Instruction page 3.)

JULY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.†												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·615	29·589	29·584	29·620	29·656	29·678	29·663	29·627	29·618	29·638	29·663	29·664	29·635
2	·645	·619	·604	·646	·698	·697	·684	·649	·615	·612	·632	·657	·649
3	·637	·607	·593	·606	·650	·660	·668	·637	·613	·614	·634	·657	·633
4	·637	·629	·629	·652	·672	·689	·689	·661	·625	·643	·655	·671	·656
5	·656	·630	·631	·646	·675	·690	·669	·641	·618	·625	·660	·666	·651
6	·640	·612	·586	·603	·627	·632	·609	·589	·585	·587	·592	·606	·604
7	·578	·535	·510	·509	·542	·560	·533	·517	·500	·506	·538	·560	·532
8	·533	·491	·487	·503	·533	·535	·540	·523	·512	·521	·553	·571	**·527**
9	·556	·515	·512	·547	·577	·594	·584	·558	·550	·563	·598	·612	·564
10	·590	·558	·557	·586	·624	·648	·626	·602	·576	·592	·652	·654	·607
11	·633	·605	·595	·611	·647	·677	·659	·643	·623	·637	·679	·719	·645
12	·686	·664	·644	·676	·698	·714	·700	·680	·654	·670	·696	·719	·684
13	·705	·683	·669	·692	·723	·747	·731	·705	·675	·687	·725	·735	**·707**
14	·719	·692	·693	·715	·731	·735	·723	·685	·647	·667	·693	·701	·700
15	·676	·648	·632	·642	·656	·683	·669	·651	·618	·635	·667	·676	·653
16	·665	·638	·642	·661	·693	·721	·707	·685	·665	·671	·708	·721	·683
17	·698	·666	·654	·678	·694	·706	·688	·662	·620	·622	·658	·673	·666
18	·650	·622	·610	·618	·642	·641	·632	·600	·566	·572	·592	·600	·611
19	·581	·562	·553	·567	·609	·617	·607	·581	·557	·573	·603	·625	·587
20	·616	·572	·576	·594	·626	·634	·606	·570	·539	·556	·591	·590	·589
21	·576	·524	·507	·530	·580	·590	·591	·568	·536	·552	·572	·590	·560
22	·570	·532	·504	·530	·562	·574	·560	·538	·498	·518	·548	·562	·542
23	·548	·514	·502	·520	·551	·566	·553	·524	·506	·516	·554	·578	·536
24	·552	·525	·534	·558	·620	·638	·624	·592	·567	·600	·633	·656	·593
25	·644	·612	·600	·626	·654	·665	·646	·618	·600	·610	·642	·662	·632
26	·641	·615	·611	·617	·651	·659	·635	·603	·579	·585	·621	·653	·622
27	·630	·606	·596	·608	·636	·652	·646	·618	·593	·596	·628	·646	·621
28	·621	·595	·591	·611	·635	·663	·655	·623	·601	·610	·625	·641	·623
29	·642	·618	·608	·619	·664	·680	·669	·646	·616	·629	·654	·665	·643
30	·661	·633	·625	·641	·668	·671	·655	·631	·597	·605	·613	·639	·636
31	·620	·586	·571	·585	·622	·632	·620	·602	·577	·590	·602	·618	·602
Mean ..	29·626	29·597	29·587	29·607	29·639	29·653	29·640	29·614	29·589	29·600	29·628	29·645	29·619

Highest hourly value during July .. 29·749
Lowest do. do. .. ·487

AUGUST.

1	29·604	29·578	29·576	29·606	29·636	29·659	29·638	29·614	29·587	29·604	29·636	29·652	29·617
2	·632	·619	·611	·633	·670	·679	·673	·657	·635	·658	·681	·698	·656
3	·687	·657	·657	·671	·699	·726	·718	·688	·675	·681	·709	·711	·689
4	·676	·654	·650	·671	·684	·704	·682	·654	·620	·630	·658	·654	·661
5	·612	·578	·570	·592	·614	·629	·612	·586	·558	·567	·604	·615	·595
6	·595	·565	·566	·589	·619	·635	·619	·605	·596	·619	·647	·669	·611
7	·656	·644	·630	·659	·692	·720	·710	·682	·659	·674	·702	·724	·680
8	·707	·681	·675	·711	·747	·759	·738	·709	·679	·691	·721	·742	·714
9	·727	·705	·687	·701	·736	·728	·709	·671	·645	·653	·685	·704	·696
10	·685	·641	·617	·635	·664	·669	·667	·637	·613	·627	·664	·682	·651
11	·668	·628	·618	·639	·668	·676	·662	·632	·602	·623	·640	·660	·643
12	·631	·597	·587	·609	·629	·647	·627	·583	·549	·561	·585	·599	·600
13	·586	·568	·554	·558	·584	·596	·596	·560	·542	·560	·588	·630	**·578**
14	·615	·584	·570	·592	·620	·642	·627	·604	·575	·592	·622	·642	·608
15	·636	·600	·595	·604	·635	·654	·644	·614	·578	·600	·618	·652	·619
16	·642	·614	·618	·642	·682	·710	·704	·678	·666	·672	·704	·734	·674
17	·718	·706	·696	·718	·760	·770	·770	·742	·720	·734	·762	·764	·740
18	·744	·729	·710	·722	·750	·758	·740	·708	·678	·686	·710	·723	·721
19	·695	·673	·677	·711	·753	·775	·759	·737	·725	·741	·759	·773	·733
20	·765	·741	·733	·753	·795	·812	·795	·757	·733	·739	·755	·773	·763
21	·747	·723	·705	·725	·755	·758	·745	·695	·671	·693	·729	·743	·724
22	·720	·686	·682	·706	·744	·768	·748	·712	·686	·712	·738	·752	·722
23	·726	·704	·694	·722	·776	·794	·776	·736	·720	·738	·768	·772	·744
24	·752	·706	·716	·736	·764	·772	·748	·708	·691	·706	·728	·726	·728
25	·706	·664	·654	·679	·716	·718	·708	·666	·646	·658	·672	·682	·680
26	·661	·639	·643	·657	·705	·721	·693	·661	·649	·669	·685	·703	·676
27	·687	·665	·669	·689	·733	·749	·731	·705	·695	·715	·745	·763	·714
28	·749	·713	·721	·731	·763	·767	·749	·723	·697	·709	·739	·769	·737
29	·762	·732	·726	·738	·766	·779	·762	·738	·728	·736	·762	·780	·751
30	·764	·734	·732	·740	·764	·788	·768	·734	·720	·736	·764	·732	·750
31	·760	·734	·734	·762	·802	·818	·813	·778	·758	·768	·789	·794	**·777**
Mean ..	29·688	29·660	29·654	29·674	29·707	29·722	29·707	29·677	29·655	29·669	29·696	29·710	29·686

Highest hourly value during August .. 29·826
Lowest do. do. .. ·542

* Derived from 24 hourly means.
† The reading refer to 7 minutes after the full hour of local mean time (*vide* Introduction, page 3.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.†												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·777	29·757	29·749	29·779	29·811	29·832	29·810	29·779	29·767	29·785	29·805	29·808	29·789
2	·805	·781	·789	·816	·849	·868	·847	·810	·803	·812	·832	·852	·822
3	·827	·788	·782	·806	·848	·859	·842	·798	·778	·785	·806	·826	·811
4	·797	·776	·771	·795	·825	·829	·815	·787	·768	·785	·811	·815	·798
5	·798	·771	·762	·777	·815	·827	·806	·769	·752	·770	·790	·799	·786
6	·778	·749	·749	·777	·827	·843	·810	·767	·747	·767	·791	·801	·784
7	·775	·737	·733	·756	793	·804	·783	·751	·735	·753	·789	·803	·768
8	·780	·752	·749	·762	·799	·806	·780	·731	·698	·718	·759	·783	·759
9	·762	·735	·727	·751	·784	·801	·772	·727	·708	·730	·753	·754	·750
10	·737	·709	·711	·735	·781	·810	·779	·740	·720	·734	·773	·789	·752
11	·751	·737	·735	·762	·790	·807	·788	·742	·722	·752	·780	·791	·764
12	·776	·760	·747	·770	·814	·823	·794	·754	·739	·746	·779	·798	·776
13	·796	·767	·765	·784	·829	·841	·812	·769	·730	·760	·791	·813	·788
14	·790	·771	·765	·776	·806	·813	·779	·730	·707	·731	·775	·785	·769
15	·763	·739	·735	·757	·794	·793	·751	·703	·683	·716	·751	·767	·746
16	·746	·715	·700	·714	·752	·747	·707	·643	·643	·664	·693	·698	·699
17	·668	·644	·636	·677	·716	·706	·674	·593	·614	·653	·671	·681	·661
18	654	·651	·651	·670	·710	·731	·702	·649	·633	·653	·699	·708	·677
19	·694	·678	·663	·694	·737	·735	·715	·649	·639	·657	·703	·710	·690
20	·686	·647	·652	·667	·697	·698	·667	·619	·603	·597	·649	·678	**·655**
21	·667	·636	·629	·651	·706	·727	·694	·660	·656	·676	·729	·767	·684
22	·731	·677	·680	·702	·735	·758	·734	·688	·685	·704	·752	·776	·719
23	·766	·753	·741	·795	·826	·846	·818	·782	·768	·788	·826	·843	·798
24	·826	·800	·798	·826	·866	·878	·854	·817	·792	·816	·850	·862	·833
25	·829	·801	·805	·843	·885	·901	·867	·823	·805	·829	·856	·861	·843
26	·838	·815	·826	·849	·896	·898	·871	·816	·810	·830	·858	·852	**·847**
27	·848	·828	·823	·849	·878	·878	·841	·802	·771	·776	·804	·820	·825
28	·794	·761	·749	·766	·788	·782	·753	·712	·692	·712	·753	·772	·753
29	·745	·722	·717	·742	·773	·790	·754	·714	·710	·730	·778	·798	·748
30	·781	·757	·760	·790	·849	·852	·813	·782	·778	·803	·831	·838	·805
Mean ..	29·766	29·740	29·737	29·761	29·799	29·809	29·781	29·737	29·722	29·741	29·775	29·788	29·763

Highest hourly value during September .. 29,906
Lowest do. do. .. ·593

OCTOBER.

1	29·815	29·804	29·805	29·837	29·879	29·885	29·859	29·827	29·815	29·833	29·859	29·865	29·842
2	·847	·829	·833	·861	·897	·901	·863	·817	·811	·823	·848	·851	·849
3	·839	·830	·825	·855	·889	·884	·847	·791	·792	·811	·838	·840	·837
4	·827	·819	·826	·863	·898	·902	·869	·830	·829	·846	·880	·883	·858
5	·862	·860	·874	·908	·954	·954	·912	·858	·858	·878	·900	·899	·895
6	·874	·858	·864	·898	·931	·920	·864	·806	·794	·816	·844	·857	·860
7	·842	·832	·845	·880	·916	·901	·856	·786	·770	·795	·829	·828	·840
8	·824	·813	·817	·871	·915	·929	·889	·840	·830	·851	·887	·903	·865
9	·880	·868	·878	·914	·956	·960	·918	·880	·874	·900	·928	·936	·909
10	·918	·895	·895	·925	·961	·969	·926	·881	·873	·889	·919	·917	·913
11	·893	·877	·873	·907	·937	·937	·892	·843	·830	·844	·873	·867	·881
12	·857	·833	·837	·867	·911	·907	·871	·825	·819	·838	·858	·865	·858
13	·854	·842	·842	·874	·930	·926	·890	·848	·842	·862	·887	·901	·875
14	·889	·875	·871	·908	·934	·946	·902	·864	·857	·872	·908	·920	·896
15	·895	·874	·885	·915	·947	·959	·915	·865	·858	·875	·913	·918	·902
16	·898	·883	·888	·918	·960	·976	·947	·909	·903	·916	·953	·956	·927
17	·937	·909	·898	·935	·972	·980	·941	·892	·873	·913	·949	·951	**·929**
18	·925	·883	·880	·905	·928	·927	·876	·820	·816	·852	·887	·884	·882
19	·862	·833	·831	·854	·898	·910	·871	·830	·827	·850	·876	·881	·860
20	·856	·834	·842	·870	·904	·913	·864	·828	·817	·843	·874	·880	·861
21	·864	·848	·846	·880	·916	·912	·856	·808	·796	·820	·859	·866	·856
22	·850	·825	·822	·858	·896	·899	·855	·807	·793	·804	·854	·868	·845
23	·860	·840	·845	·884	·932	·940	·896	·855	·854	·876	·918	·936	·889
24	·922	·908	·902	·926	·967	·972	·918	·872	·853	·866	·889	·899	·908
25	·878	·854	·847	·872	·904	·910	·852	·804	·783	·803	·843	·855	·850
26	·834	·800	·788	·815	·842	·863	·803	·755	·741	·765	·824	·840	·805
27	·820	·800	·798	·834	·872	·877	·832	·780	·778	·801	·844	·864	·826
28	·842	·806	·809	·836	·859	·860	·816	·760	·729	·753	·785	·788	·803
29	·775	·751	·744	·767	·791	·790	·739	·694	·687	·700	·747	·759	**·746**
30	·738	·719	·722	·752	·792	·802	·768	·736	·743	·767	·811	·823	·767
31	·811	·794	·804	·843	·883	·894	·843	·796	·802	·837	·875	·886	·841
Mean ..	29·858	29·839	29·840	29·872	29·909	29·913	29·869	29·823	29·814	29·835	29·870	29·877	29·860

Highest hourly value in October .. 29·981
Lowest do. do. .. ·680

* Derived from 24 hourly values.
† The readings refer to 7 minutes after the full hour of local mean time (*vide* Introduction, page 3.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.†												Mean.*
	0	2	4	6	8	10	12	14	16	18	20	22	
1	29·877	29·856	29·863	29·898	29·949	29·954	29·904	29·853	29·848	29·872	29·898	29·913	29·891
2	·893	·861	·854	·885	·930	·929	·887	·839	·829	·851	·880	·883	·876
3	·862	·838	·830	·863	·901	·901	·852	·802	·794	·827	·861	·869	·850
4	·858	·848	·852	·882	·924	·937	·887	·840	·836	·863	·907	·924	·882
5	·911	·896	·897	·941	·989	·989	·927	·877	·873	·903	·939	·943	·924
6	·919	·895	·891	·931	·973	·982	·936	·876	·867	·885	·927	·939	·924
7	·915	·889	·898	·929	·976	·978	·919	·863	·841	·863	·904	·916	·908
8	·897	·876	·863	·897	·945	·952	·903	·852	·843	·861	·900	·911	·891
9	·894	·874	·872	·900	·932	·940	·902	·854	·848	·866	·898	·912	·891
10	·897	·883	·875	·909	·957	·965	·913	·869	·865	·881	·908	·919	·904
11	·904	·890	·882	·914	·962	·977	·922	·864	·848	·872	·908	·918	·905
12	·895	·881	·885	·910	·941	·949	·890	·834	·828	·841	·877	·894	·885
13	·868	·851	·861	·891	·925	·925	·869	·810	·795	·807	·841	·853	·857
14	·834	·819	·823	·848	·886	·887	·831	·780	·766	·783	·815	·821	**·824**
15	·807	·793	·813	·853	·879	·888	·829	·789	·782	·809	·851	·864	·831
16	·848	·826	·834	·880	·922	·916	·881	·818	·800	·826	·867	·874	·859
17	·842	·816	·817	·843	·882	·882	·837	·785	·774	·795	·828	·829	·827
18	·807	·789	·788	·830	·875	·879	·837	·793	·798	·821	·861	·877	·831
19	·856	·827	·828	·862	·909	·919	·880	·842	·831	·862	·901	·908	·870
20	·899	·888	·889	·918	·956	·953	·903	·866	·856	·871	·907	·912	·902
21	·896	·874	·868	·889	·927	·925	·870	·824	·810	·826	·870	·875	·871
22	·847	·826	·821	·855	·905	·919	·878	·837	·839	·861	·901	·906	·867
23	·887	·864	·869	·890	·957	·979	·937	·887	·877	·903	·951	·953	·913
24	·928	·905	·907	·923	·966	·978	·945	·896	·888	·908	·947	·943	·928
25	·909	·881	·885	·909	·959	·971	·929	·881	·877	·901	·939	·948	·917
26	·936	·920	·920	·946	·978	·989	·940	·900	·892	·922	·954	·956	·939
27	·942	·924	·920	·944	·990	·988	·938	·892	·878	·894	·932	·938	·931
28	·917	·892	·889	·921	·960	·975	·939	·895	·891	·913	·955	·962	·926
29	·936	·915	·917	·943	·995	30·004	·965	·909	·898	·931	·977	·994	**·949**
30	·962	·936	·925	·949	·992	·002	·964	·903	·894	·910	·948	·960	·945
Mean ..	29·888	29·868	29·868	29·898	29·941	29·948	29·900	29·851	29·842	29·864	29·902	29·910	29·891

Highest hourly value during November .. 30·011
Lowest do. do. .. 29·766

DECEMBER.

1	29·943	29·919	29·904	29·924	29·948	29·957	29·915	29·847	29·830	29·852	29·902	29·910	29·903
2	·893	·870	·871	·905	·939	·947	·904	·866	·867	·902	·957	·988	·911
3	·975	·963	·957	·975	30·016	30·034	·990	·946	·947	·975	30·010	30·011	**·985**
4	·996	·976	·963	·986	·031	·031	·984	·936	·917	·932	29·969	29·982	·975
5	·949	·930	·901	·916	29·956	29·965	·916	·858	·854	·886	·930	·949	·918
6	·931	·896	·883	·903	·943	·954	·921	·877	·866	·885	·921	·932	·909
7	·911	·880	·866	·880	·922	·938	·893	·940	·828	·851	·908	·926	·887
8	·912	·890	·894	·929	·984	30·004	·956	·899	·886	·902	·935	·962	·931
9	·960	·948	·946	·973	30·019	·027	·970	·902	·884	·902	·936	·944	·950
10	·921	·897	·891	·917	29·955	29·973	·925	·861	·849	·854	·878	·881	·900
11	·874	·844	·840	·864	·912	·928	·882	·826	·814	·836	·872	·881	**·865**
12	·859	·839	·848	·875	·925	·938	·903	·854	·842	·859	·901	·925	·883
13	·909	·885	·887	·902	·953	·957	·925	·862	·858	·889	·923	·939	·909
14	·914	·898	·890	·910	·944	·956	·905	·853	·840	·860	·904	·920	·899
15	·898	·878	·880	·900	·949	·955	·911	·850	·834	·856	·900	·923	·895
16	·902	·881	·874	·909	·967	·984	·932	·860	·844	·885	·937	·950	·910
17	·926	·904	·881	·922	·988	·995	·945	·881	·871	·895	·929	·939	·923
18	·922	·894	·880	·914	·953	·952	·899	·836	·830	·860	·913	·924	·898
19	·907	·887	·890	·913	·954	·965	·920	·869	·858	·881	·933	·947	·911
20	·922	·900	·898	·931	·985	30·000	·956	·898	·874	·885	·918	·931	·925
21	·905	·883	·870	·900	·942	29·946	·908	·854	·840	·860	·908	·936	·897
22	·908	·886	·875	·898	·942	·951	·895	·835	·824	·857	·907	·917	·891
23	·893	·869	·856	·873	·921	·935	·887	·832	·818	·839	·869	·877	·872
24	·872	·850	·850	·868	·928	·944	·906	·851	·843	·858	·899	·924	·883
25	·903	·893	·881	·891	·932	·941	·878	·805	·792	·825	·865	·886	·875
26	·868	·852	·848	·869	·916	·933	·894	·841	·834	·857	·900	·914	·879
27	·904	·886	·886	·909	·964	·980	·952	·894	·878	·904	·954	·960	·924
28	·944	·930	·928	·954	30·008	30·014	·970	·920	·910	·936	·963	·971	·955
29	·949	·932	·925	·951	·010	·020	·976	·921	·921	·943	·967	·969	·958
30	·951	·921	·910	·929	29·975	29·977	·929	·879	·873	·905	·949	·955	·930
31	·943	·925	·919	·939	·991	30·005	·963	·903	·907	·929	·993	30·005	·953
Mean ..	29·918	29·897	29·890	29·914	29·960	29·973	29·926	29·870	29·859	29·883	29·924	29·938	29·913

Highest hourly value during December .. 30·038
Lowest do. do. .. 29·792

*Derived from 24 hourly values.

† The readings refer to 7 minutes after the full hour of local mean time (*vide* Introduction, page 3.)

BI-HOURLY TOTALS OF RAINFALL (IN INCHES), 1923.

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily† total by Newman Raingauge.
															h. to h.	
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	0·01	0·01	..	0·01	0·11	1·47	..	0·01	..	0·01	1·63	1·34	14 15	1·70
13	0·11	0·04	0·01	1·47	0·14	..	..	0·01	..	0·03	0·01	0·71	3·03*	0·74	6 7	3·18*
14	0·50	..	..	..	..	..	..	..	..	..	..	..		0·43	0 1	
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
19	..	0·18	0·11	0·01	0·02	..	..	..	0·02	..	0·21	..	0·55	0·21	20 21	0·60
20	0·02	..	..	..	..	..	..	..	..	..	..	..	0·02	0·02	1 2	0·02
21	..	..	0·02	0·08	..	0·01	0·02	..	..	..	..	..	0·13	0·08	6 7	0·16
22	..	..	..	..	..	0·03	..	..	..	..	..	..	0·03	0·02	10 11	0·03
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	0·02	..	..	..	..	..	..	..	..	0·02	0·02	7 8	0·02
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	0·01	..	0·08	..	..	..	..	..	..	..	0·09	0·08	8 9	0·11
29	0·03	0·04	..	..	..	..	..	0·50	..	0·06	0·04	..	0·67	0·39	14 15	0·72
30	..	0·04	0·26	0·18	1·28	0·26	..	..	0·01	0·15	0·04	..	2·22	1·04	9 10	2·31
Total ..	0·66	0·30	0·42	1·77	1·52	0·31	0·13	1·98	0·03	0·25	0·30	0·72	8·39	..	..	8·96

JULY.

															h. to h.	
1	..	0·09	0·35	0·30	0·09	0·16	0·05	0·01	0·04	0·01	..	..	1·10	0·21	5 6	1·14
2	0·12	0·66	1·12	1·80	0·80	0·05	0·08	0·05	0·07	0·61	1·21	0·72	7·29	1·29	6 7	7·66
3	0·42	0·54	3·87	3·39	0·59	0·27	0·03	..	..	..	..	..	**9·11**	**2·59**	5 6	**9·34**
4	..	..	..	..	..	..	0·03	0·06	..	..	0·01	..	0·10	0·05	14 15	0·10
5	..	..	..	..	..	..	..	..	..	..	0·02	..	0·02	0·02	21 22	0·02
6	0·11	0·05	0·11	..	..	..	0·01	0·05	0·13	..	..	0·02	0·48	0·11	4 5	0·53
7	..	0·02	..	..	0·05	..	..	..	0·01	..	..	..	0·08	0·05	9 10	0·08
8	..	..	0·16	0·45	..	..	1·49	1·89	0·87	0·14	0·41	0·38	5·79	1·13	13 14	5·89
9	0·03	0·28	..	0·03	0·08	0·23	..	0·04	..	0·06	0·02	..	0·77	0·23	3 4	0·80
10	..	0·02	..	0·10	..	..	..	..	..	..	..	0·06	0·18	0·10	6 7	0·18
11	0·01	..	..	..	..	..	..	..	..	0·02	..	..	0·03	0·02	19 20	0·05
12	..	0·08	..	0·45	0·03	..	..	0·51	0·07	..	0·02	..	1·16	0·44	12 13	1·18
13	..	..	..	..	..	0·03	0·01	0·02	0·03	..	0·04	0·09	0·22	0·09	22 23	0·22
14	..	0·09	..	..	..	..	0·01	0·02	..	..	..	0·05	0·17	0·09	2 3	0·17
15	..	..	0·04	..	0·15	0·49	3·26	0·16	0·08	..	0·02	0·02	4·22	2·35	12 13	4·30
16	..	0·04	0·90	0·11	..	..	0·01	..	0·04	..	..	..	1·10	0·69	4 5	1·13
17	0·18	..	0·01	..	0·01	0·06	..	..	0·03	..	0·01	0·02	0·32	0·16	0 1	0·34
18	..	..	0·01	0·02	..	0·05	0·02	..	..	..	..	..	0·10	0·05	11 12	0·10
19	0·01	..	..	..	..	..	..	..	0·02	..	0·02	..	0·05	0·02	17 18	0·05
20	..	0·08	..	..	..	..	..	..	..	..	0·02	0·16	0·26	0·14	23 24	0·27
21	..	0·03	..	0·14	0·32	0·19	0·04	0·02	..	..	0·02	..	0·76	0·20	8 9	0·77
22	0·21	0·23	..	..	..	0·19	1·21	0·28	0·11	0·07	0·12	..	2·42	0·67	12 13	2·43
23	0·51	0·21	0·19	0·26	0·16	0·06	..	..	..	0·37	0·25	0·15	2·16	0·51	1 2	2·17
24	0·18	0·03	0·04	0·07	0·64	0·19	0·06	..	..	..	..	..	1·21	0·40	9 10	1·20
25	..	..	..	..	0·06	..	..	..	..	..	..	..	0·06	0·06	8 9	0·08
26	..	..	0·01	..	..	0·05	..	0·04	..	..	..	..	0·10	0·05	11 12	0·11
27	..	..	..	..	..	..	0·09	0·08	..	..	..	..	0·17	0·08	12 13	0·17
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
30	..	..	0·03	0·01	0·03	..	..	..	..	0·09	0·02	..	0·18	0·09	18 19	0·17
31	..	0·61	0·21	..	0·08	0·05	0·25	..	..	..	..	..	1·20	0·46	2 3	1·22
Total ..	1·78	3·06	7·05	7·13	3·09	2·07	6·65	3·23	1·50	1·37	2·21	1·67	40·81	..	..	41·88

†Adopted as the standard instrument in the observatory since 1845.
*Total for two days.

AUGUST. (FROM PLUVIOGRAPH RECORDS).

Date.	Hours. 0–2	2–4	4–6	6–8	8–10	10–12	12–14	14–16	16–18	18–20	20–22	22–24	Daily total.	Maximum fall in one hour	Time of occurrence. h. to h.	Daily* total by Newman Raingauge.
1	..	..	..	..	..	0·02	..	..	..	0·02	..	0·01	0·05	0·02	11 12	0·07
2	..	..	0·01	0·01	..	..	0·23	..	..	..	..	..	0·25	0·23	12 13	0·23
3	..	..	0·03	..	..	..	..	..	..	..	..	0·02	0·05	0·03	4 5	0·05
4	..	0·01	0·01	0·01	0·01	..	..	..	0·01	..	..	..	0·05	0·01	2 3	0·07
5	..	..	0·01	..	..	0·06	..	..	..	..	..	..	0·07	0·06	11 12	0·09
6	0·03	..	..	..	0·01	..	..	0·02	..	0·04	..	..	0·10	0·04	19 20	0·11
7	0·23	0·06	..	..	..	..	..	..	..	0·78	0·02	0·11	1·20	**0·68**	19 20	1·21
8	0·19	0·06	0·09	0·10	0·66	0·20	0·04	..	..	..	0·02	0·02	**1·38**	0·52	8 9	**1·37**
9	0·06	0·03	..	0·07	0·02	..	0·01	0·05	..	0·07	..	..	0·31	0·07	6 7	0·29
10	0·19	..	0·03	..	0·01	..	..	0·40	0·10	0·03	..	..	0·76	0·33	15 16	0·78
11	..	..	0·03	..	..	..	..	..	0·04	..	0·03	0·14	0·24	0·13	23 24	0·25
12	0·05	..	0·05	0·17	0·05	0·01	0·01	0·06	0·02	0·09	0·01	0·01	0·53	0·17	6 7	0·52
13	0·07	..	..	..	0·15	0·07	0·01	..	0·02	0·05	..	0·10	0·47	0·13	8 9	0·49
14	0·03	0·03	0·03	..	..	0·04	..	..	..	0·06	..	..	0·19	0·06	19 20	0·18
15	0·03	..	0·04	0·01	0·02	0·07	0·20	..	0·22	0·06	0·01	..	0·66	0·22	17 18	0·67
16	..	0·01	..	..	..	..	0·02	..	..	..	..	..	0·03	0·02	12 13	0·04
17	..	..	..	..	..	..	..	..	..	..	0·01	..	0·01	0·01	21 22	0·01
18	..	..	0·01	..	..	..	..	..	0·10	..	..	0·06	0·17	0·10	17 18	0·17
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	0·01	0·01	0·01	22 23	0·01
21	..	..	0·02	..	..	..	..	..	0·04	..	..	0·71	0·77	0·57	22 23	0·80
22	0·01	..	..	..	..	..	..	0·15	..	..	..	..	0·16	0·10	14 15	0·12
23	..	..	0·03	..	..	..	..	..	..	..	..	..	0·03	0·03	4 5	0·04
24	..	..	0·29	..	..	..	..	..	..	..	..	..	0·29	0·29	5 6	0·31
25	..	..	0·07	..	..	..	0·04	..	..	..	..	..	0·11	0·07	5 6	0·14
26	0·14	..	..	..	..	..	0·03	0·01	..	..	..	..	0·18	0·14	0 1	0·16
27	..	..	0·02	..	..	..	0·03	0·01	..	..	..	..	0·06	0·03	13 14	0·06
28	..	..	0·02	..	..	..	..	..	..	..	..	..	0·02	0·02	4 5	0·03
29	..	..	..	..	..	..	..	0·02	..	..	..	..	0·02	0·02	15 16	0·02
30	0·03	..	..	..	..	..	..	..	..	..	..	..	0·03	0·03	1 2	0·04
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Mean ..	1·06	0·20	0·79	0·37	0·93	0·47	0·62	0·72	0·55	1·20	0·10	1·19	8·20	..	..	8·33

SEPTEMBER.

1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·02
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	0·09	0·09	0·09	22 23	0·10
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	0·17	0·02	..	..	..	0·19	0·17	15 16	0·19
10	..	..	0·08	0·09	0·12	0·07	0·03	0·01	..	..	0·28	..	0·68	0·28	20 21	0·72
11	..	..	..	..	..	0·02	0·13	0·04	..	0·02	..	..	0·21	0·11	12 13	0·22
12	0·16	0·07	..	..	..	..	0·53	0·25	..	..	..	..	0·01	0·48	13 14	1·02
13	0·11	..	..	..	0·02	0·21	..	..	..	..	..	..	0·34	0·21	11 12	0·35
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	0·03	0·02	0·05	0·03	21 22	0·07
16	0·09	..	..	..	..	..	0·04	0·11	..	0·09	0·08	..	0·41	0·09	14 15	0·43
17	0·01	0·04	1·19	0·08	0·01	..	..	..	..	0·11	..	..	1·44	0·86	4 5	1·48
18	..	..	..	..	0·05	..	..	..	..	0·09	0·58	..	0·72	0·56	20 21	0·74
19	..	..	..	..	..	..	..	..	0·07	0·11	0·05	..	0·23	0·11	19 20	0·23
20	0·02	0·07	0·31	0·01	0·07	0·31	2·83	4·52	1·78	0·32	0·33	0·15	**10·73**	**2·51**	13 14	**11·03**
21	0·01	0·33	0·53	0·13	0·07	..	..	..	..	..	..	0·60	1·67	0·60	23 24	1·65
22	0·01	..	..	..	..	..	..	..	..	..	..	..	0·01	0·01	0 1	0·01
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	0·02	..	..	..	..	..	..	..	..	..	0·02	0·02	5 6	0·02
28	..	0·02	..	..	0·01	..	..	..	..	..	..	..	0·03	0·02	3 4	0·04
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mean ..	0·41	0·53	2·13	0·31	0·35	0·61	3·56	5·10	1·87	0·74	1·35	0·86	17·83	..	..	18·32

* Adopted as the standard instrument in the observatory since 1845.

Note.—There was a fall of 0·05″ of rain on the 15th February between 15h and 17h and 0·01″ on the 3rd April between 9h and 10h.

The months of January, March, May and October to December were dry.

Total fall of rain in the year was 75·29″ by Pluviograph and 77·56″ by Newman; the difference is due to difference in height of the receiving funnels of the two instruments.

Total number of rainy days in the year was 59 according to Pluviograph and 61 according to Newman, assuming a rainy day to be one on which a tenth of an inch or upwards has fallen.

The greatest fall of rain during a day in the year, that of 20th September, was 10·73″ by Pluviograph and 11·03″ by Newman.

JANUARY. (IN MILES PER HOUR).

Date.	Hours.												* Mean.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	7	6	6	9	9	5	6	5	12	11	9	4	7·3	16 35	20	11 28	1
2	5	5	7	8	10	8	5	5	7	10	11	3	6·7	18 57	18	13 23	1
3	3	5	9	7	10	7	4	6	9	10	9	5	7·1	19 6	15	13 55	1
4	3	5	9	9	8	7	1	4	5	5	3	3	4·7	5 5	12	13 35	0
5	5	6	5	10	6	3	1	5	7	3	0	3	4·4	6 40	12	8 28	0
6	4	2	5	5	7	5	2	1	3	6	3	3	4·0	3 30	10	1 7	0
7	4	5	9	7	3	3	4	4	5	3	2	3	4·3	4 6	10	7 50	0
8	3	3	3	7	7	1	1	4	5	1	2	2	**3·4**	15 38	10	11 0	0
9	1	3	6	7	7	3	1	7	5	5	4	3	4·5	3 28	10	0 0	0
10	7	5	5	4	6	5	4	7	7	5	5	5	4·8	14 12	10	11 35	0
11	4	6	7	3	6	4	2	8	11	11	10	5	6·5	16 10	18	7 8	0
12	3	7	11	8	9	8	10	13	15	13	12	7	**9·7**	15 16	**24**	9 50	2
13	7	7	5	5	5	5	7	9	11	10	7	3	6·3	16 13	18	11 35	0
14	3	5	3	4	5	4	6	7	9	10	6	3	5·3	18 35	16	3 52	0
15	3	4	4	3	4	1	4	7	11	9	7	3	4·9	16 35	19	8 48	0
16	3	3	4	4	4	1	3	9	9	10	4	3	4·9	16 10	16	9 55	0
17	3	3	4	5	5	3	7	9	13	10	5	1	5·9	15 14	20	1 30	0
18	3	2	3	7	5	3	1	3	4	5	3	3	3·6	4 45	10	2 22	0
19	3	1	4	5	6	3	3	3	3	6	4	3	3·6	7 28	10	2 35	0
20	1	5	3	3	4	5	7	6	8	8	7	5	5·2	16 25	14	0 0	0
21	6	3	4	3	3	9	9	9	13	11	9	5	6·7	16 46	20	8 52	1
22	7	7	6	9	5	6	12	11	12	15	9	7	8·8	18 18	21	9 12	0
23	7	5	5	7	5	5	8	9	9	10	9	9	7·1	16 58	16	9 30	1
24	4	3	7	7	7	5	6	7	12	12	9	7	7·1	16 55	19	10 32	1
25	4	3	5	9	9	9	4	9	9	10	9	5	7·1	15 46	16	12 31	0
26	3	5	5	5	7	3	1	9	9	11	11	5	6·3	18 43	18	0 22	0
27	4	3	5	5	7	5	6	7	11	12	8	5	6·1	16 42	18	1 55	1
28	4	3	3	5	5	3	3	5	7	7	5	3	4·5	17 8	11	1 32	0
29	1	4	3	5	4	1	3	7	4	7	1	1	3·5	18 16	10	1 2	0
30	2	2	3	5	3	5	3	3	6	5	3	5	3·7	16 12	9	1 6	0
31	4	7	5	5	8	7	4	5	5	5	3	5	4·9	9 25	11	12 35	0
Mean ..	3·9	4·3	5·3	6·0	6·1	4·6	4·5	6·5	8·3	8·3	6·1	4·1	5·6				

FEBRUARY.

1	6	3	4	5	5	5	7	9	11	11	4	3	5·7	17 29	17	0 25	0
2	1	4	12	4	4	7	7	9	10	8	10	6	6·8	4 10	18	1 7	0
3	5	3	3	4	5	6	5	8	8	7	6	1	4·9	16 15	14	7 40	0
4	5	3	2	3	4	4	3	7	9	9	7	6	5·2	16 47	14	5 15	0
5	7	10	11	6	5	3	5	9	11	9	8	7	7·7	15 49	18	8 28	0
6	8	7	5	5	6	8	9	11	11	9	11	10	8·3	17 15	18	8 10	2
7	13	11	5	5	7	6	12	13	14	13	7	9	9·5	16 6	22	7 13	0
8	9	7	7	10	9	9	11	13	15	13	10	7	**10·1**	5 39	**24**	22 55	2
9	3	3	5	4	5	1	5	6	9	7	7	5	4·7	15 2	14	8 52	0
10	4	4	4	4	4	11	10	7	9	9	8	6	6·5	10 35	17	1 14	1
11	4	4	4	3	5	8	6	6	7	9	7	5	5·4	18 20	13	11 2	0
12	3	4	7	5	6	4	4	5	5	5	4	3	4·7	12 33	10	17 48	0
13	3	3	5	5	5	8	7	9	10	9	7	4	6·3	17 48	15	9 5	0
14	3	3	7	4	5	3	3	7	7	5	5	2	4·4	15 45	12	8 33	0
15	1	6	9	10	9	3	9	10	8	8	7	2	7·1	17 30	14	0 52	0
16	2	2	3	5	5	9	7	8	7	6	6	3	5·3	14 16	12	0 48	0
17	4	5	5	4	5	5	9	10	12	11	12	9	7·7	16 28	20	11 28	0
18	5	7	7	7	3	3	7	7	9	9	7	4	5 9	16 46	14	7 22	0
19	3	7	5	3	5	5	7	7	7	5	5	5	5·1	15 43	12	7 25	0
20	7	5	4	6	1	7	7	9	7	5	4	1	5·3	13 48	14	7 39	0
21	4	3	5	7	8	4	4	5	5	3	4	3	4·7	6 32	10	1 53	0
22	2	7	9	7	9	11	13	9	8	7	7	11	8·6	21 31	20	1 5	0
23	11	7	9	7	9	10	10	9	9	7	5	3	7·8	12 25	18	1 53	0
24	3	4	5	5	6	10	12	11	13	14	12	7	8·5	19 11	22	7 35	0
25	3	5	5	5	6	5	7	11	13	12	11	5	7·3	15 22	20	7 46	0
26	4	5	9	9	9	6	3	7	9	11	14	7	7·9	20 25	24	9 48	0
27	3	1	2	6	5	3	7	7	7	5	1	1	**3·9**	14 20	12	0 32	0
28	3	1	3	3	7	3	5	7	7	5	3	0	3·9	14 50	13	0 0	0
Mean ..	4·6	4·8	6·7	5·4	5·8	6·0	7·2	8·4	9·2	8·3	7·1	4·8	6·4				

* Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

MARCH. (IN MILES PER HOUR.)

Date.	Hours.												* Mean.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	4	7	4	3	5	4	5	7	7	4	1	1	4·1	16 9	11	17 32	0
2	5	5	6	6	6	3	5	9	9	7	5	1	5·1	15 30	12	6 38	0
3	2	1	3	5	5	2	9	10	10	11	11	4	6·3	19 38	18	0 8	0
4	4	7	7	6	7	1	4	5	7	5	2	7	5·2	4 5	12	0 16	0
5	8	5	1	1	5	7	4	6	7	3	1	1	4·3	0 38	12	0 0	0
6	1	1	5	3	5	3	7	9	9	7	7	3	4·7	15 30	14	2 0	0
7	2	4	3	2	3	7	7	11	11	10	8	5	6·2	15 15	16	8 2	0
8	3	7	7	7	6	7	9	11	7	6	3	9	6·9	21 25	18	17 45	0
9	4	4	4	3	5	2	4	7	7	5	2	3	4·1	15 40	12	1 55	0
10	3	5	5	4	6	3	7	8	9	7	4	5	5·1	16 11	15	0 6	0
11	4	5	3	4	7	3	7	9	9	10	9	4	6·1	17 50	17	4 2	0
12	3	1	4	5	6	1	5	7	8	9	5	4	4·7	17 36	16	2 20	0
13	2	4	4	3	4	4	5	7	7	5	1	3	4·1	16 24	14	0 7	0
14	2	5	7	3	3	2	7	7	5	3	1	4	3·9	12 24	12	0 0	0
15	1	2	1	3	7	9	7	6	7	1	3	5	4·5	13 45	14	0 0	0
16	3	3	2	7	4	2	5	9	12	10	10	11	6·3	17 11	21	1 22	0
17	10	7	8	8	6	5	7	11	12	11	10	11	**8·7**	16 45	20	9 32	0
18	12	12	7	3	4	3	7	11	10	10	3	1	6·5	15 25	18	6 59	0
19	3	1	1	1	3	3	7	11	11	10	4	1	4·8	14 33	17	4 20	0
20	1	3	5	4	5	7	7	11	10	7	7	7	6·2	14 59	18	0 0	0
21	9	7	5	2	3	6	7	9	9	7	1	3	5·3	1 45	15	6 25	0
22	2	1	11	11	5	3	6	7	9	8	5	1	5·9	3 57	18	2 50	0
23	3	0	1	1	7	4	7	10	8	7	4	1	4·3	14 11	16	0 51	0
24	5	3	9	1	2	7	10	11	10	11	1	1	5·4	15 15	18	5 58	0
25	1	1	1	1	3	3	9	9	7	3	2	1	**3·5**	14 17	13	0 20	0
26	7	6	2	7	7	2	5	8	7	5	11	10	6·6	21 37	17	11 52	0
27	11	10	2	9	3	3	7	9	7	3	11	9	7·1	0 22	18	4 14	0
28	14	9	4	7	4	2	7	9	7	1	5	1	5·7	1 30	18	4 40	0
29	2	12	10	1	1	5	8	11	15	11	11	5	7·5	16 24	**24**	1 2	0
30	5	3	1	1	2	4	10	12	13	7	6	5	5·7	16 24	19	9 10	0
31	5	1	5	8	3	3	8	9	11	5	1	1	5·1	16 27	18	4 35	0
Mean ..	4·5	4·6	4·5	4·2	4·6	3·9	6·7	8·9	8·9	6·7	5·0	4·1	5·5				

APRIL.

1	5	3	5	9	5	5	7	11	10	1	3	2	5·9	15 39	20	9 14	0
2	1	5	1	5	1	4	4	7	9	6	4	3	**4·5**	15 56	15	5 26	0
3	1	1	1	3	4	5	7	10	14	4	2	6	4·7	16 25	24	0 28	0
4	3	4	11	4	7	4	4	7	13	7	3	2	5·7	4 13	20	10 6	0
5	3	2	1	1	1	7	7	9	11	8	3	3	4·5	16 57	16	1 58	0
6	1	3	1	4	5	4	9	10	13	9	6	5	5·7	16 54	19	0 0	0
7	6	1	3	3	5	9	10	12	13	11	9	9	7·5	14 50	19	6 43	0
8	9	7	3	4	7	9	11	15	16	12	9	9	**9·1**	15 49	25	5 35	0
9	8	5	5	2	4	3	9	9	9	7	2	0	5·1	12 47	**14**	5 28	0
10	8	11	10	5	7	7	11	9	9	9	7	5	7·9	11 51	18	9 52	2
11	5	5	5	4	6	7	8	8	9	8	7	7	6·5	15 34	16	7 30	1
12	7	3	4	3	5	7	14	15	15	12	8	7	8·3	12 56	**25**	2 5	1
13	8	9	3	3	4	7	8	10	11	9	7	2	6·7	15 45	17	8 17	0
14	6	10	4	4	5	3	7	8	7	5	1	1	5·5	2 40	16	6 46	2
15	10	9	5	5	3	4	9	11	11	7	3	5	6·9	15 30	16	7 9	0
16	7	3	3	2	7	9	11	12	13	12	12	9	8·5	15 11	20	7 15	1
17	7	7	6	4	3	4	12	13	11	12	8	9	7·9	14 31	20	8 45	0
18	7	6	5	5	6	7	8	7	9	7	5	3	6·2	16 30	14	21 9	0
19	3	3	4	6	4	11	11	13	13	12	11	10	8·8	14 54	22	8 46	0
20	10	9	4	5	1	7	9	11	11	9	5	3	7·0	15 23	20	8 26	1
21	6	7	3	3	5	3	10	11	9	7	4	2	5·8	13 21	16	6 15	0
22	3	3	3	10	5	3	9	12	11	7	5	5	6·3	13 34	17	5 30	1
23	7	7	1	2	3	5	8	11	10	8	5	12	6·7	23 28	20	6 11	0
24	5	4	7	5	6	7	9	11	9	7	9	7	6·8	14 11	14	9 40	2
25	6	4	3	2	7	9	11	11	11	6	5	3	6·3	11 41	18	21 53	0
26	5	3	3	4	5	7	9	12	9	7	5	5	6·1	1 45	16	3 20	2
27	5	3	4	5	5	7	10	11	9	7	5	4	6·4	14 2	16	2 45	2
28	5	7	7	5	5	9	8	9	7	5	5	5	6·4	14 53	14	5 20	2
29	4	3	3	1	3	3	9	9	8	5	5	5	5·0	14 28	14	3 20	0
30	4	5	1	1	4	4	7	9	9	8	7	7	5·7	15 3	14	3 16	0
Mean ..	5·5	5·1	4·0	4·0	4·6	6·0	8·9	10·4	10·6	7·8	5·7	5·2	6·5				

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

MAY. (IN MILES PER HOUR.)

Date.	Hours.												* Mean.	Maximum		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	6	7	7	1	2	7	7	11	10	7	5	7	6·3	14 26	14	6 29	0
2	7	6	5	4	5	11	10	9	11	9	7	3	6·9	16 19	16	8 0	1
3	3	5	4	4	5	7	7	7	8	7	5	5	5·7	15 20	12	8 2	2
4	6	3	5	3	3	5	7	9	7	6	5	4	5·1	14 27	12	19 36	0
5	5	5	3	3	3	5	9	9	10	8	7	6	6·1	16 6	16	6 24	0
6	7	9	7	5	5	7	9	9	9	9	7	7	7·1	18 5	14	11 23	2
7	6	7	5	5	5	7	8	9	9	7	5	6	6·9	14 7	16	20 40	1
8	7	5	7	5	5	7	7	7	7	5	3	3	5·3	14 55	13	21 3	0
9	4	3	2	1	1	5	7	7	9	7	5	5	4·9	17 46	12	8 29	0
10	3	2	2	3	3	3	7	9	11	6	5	5	5·1	16 23	15	5 10	0
11	3	3	3	1	5	9	11	11	12	11	11	9	7·9	15 58	20	6 25	0
12	9	7	5	4	9	9	11	11	9	7	4	4	7·2	12 56	18	6 15	0
13	5	3	1	2	6	8	11	7	6	5	5	5	5·3	12 20	15	3 42	0
14	5	4	4	3	5	7	7	7	7	6	5	7	5·4	14 30	12	6 56	0
15	5	5	4	3	5	7	7	7	7	7	6	6	6·0	14 46	14	6 24	0
16	7	7	5	5	5	7	8	9	10	9	6	5	6·7	16 19	15	4 47	0
17	4	3	0	1	2	5	8	9	9	9	6	3	4·9	16 54	15	3 40	0
18	3	3	1	1	3	5	5	6	7	7	3	4	**3·7**	17 33	14	3 7	0
19	4	3	2	3	4	5	7	10	9	7	4	6	5·2	14 29	16	5 55	0
20	7	3	3	5	8	10	7	7	7	9	4	3	6·4	18 15	17	20 47	0
21	3	3	1	1	5	9	7	6	7	7	5	4	4·9	11 10	13	2 10	0
22	5	7	8	5	5	4	7	10	14	11	11	11	7·9	16 13	20	9 46	0
23	7	9	3	3	9	9	13	15	12	7	8	14	**8·7**	22 16	20	4 20	0
24	13	8	5	3	1	7	9	11	9	9	7	7	7·4	15 30	17	8 2	0
25	7	3	4	3	3	5	9	10	11	11	9	6	6·6	19 8	18	5 56	0
26	5	3	3	3	3	7	8	9	10	5	8	11	6·3	22 51	18	6 10	0
27	9	5	3	1	2	7	9	12	14	13	13	10	7·9	17 35	**21**	1 32	0
28	5	3	2	3	5	7	7	11	9	9	7	7	6·2	15 14	16	6 11	0
29	7	6	7	7	6	8	9	12	13	11	9	9	8·5	16 16	20	8 29	1
30	9	7	5	3	7	8	8	7	7	5	7	7	6·5	0 40	14	5 27	2
31	7	7	4	3	3	5	7	9	7	11	9	7	6·9	18 31	16	4 34	0
Mean ..	5·9	5·0	3·9	3·1	4·5	6·8	8·2	9·1	9·3	8·0	6·5	6·3	6·3				

JUNE.

1	7	5	2	1	5	7	5	6	6	3	3	3	4·7	11 24	15	4 5	0
2	3	1	1	7	12	11	10	7	7	4	3	1	5·6	10 6	16	1 36	0
3	5	5	7	1	1	4	5	7	7	5	3	1	**4·1**	15 51	12	2 15	0
4	1	2	2	1	3	5	5	7	9	6	7	5	4·1	16 47	14	0 0	0
5	2	1	1	2	3	5	7	6	7	6	5	4	4·4	12 28	12	0 0	0
6	5	4	5	7	7	7	7	9	7	5	5	4	5·9	6 10	12	2 30	0
7	5	7	7	7	6	9	8	9	9	7	7	4	6·9	14 15	14	1 39	0
8	6	7	5	4	4	5	8	9	9	8	5	5	6·4	13 29	14	7 30	0
9	7	4	4	3	3	6	7	8	5	4	3	4	5·0	14 52	12	3 43	0
10	4	3	3	7	4	5	7	9	7	6	3	5	5·3	12 4	12	0 18	0
11	6	8	10	11	11	15	15	13	9	12	13	9	10·9	19 37	22	16 35	2
12	17	15	11	11	8	3	7	10	4	1	2	2	7·3	14 20	24	10 26	0
13	11	7	14	19	19	20	18	7	6	4	10	11	12·0	6 17	**35**	6 55	0
14	9	7	5	3	7	7	8	11	8	9	9	9	7·6	0 31	17	5 26	0
15	7	8	7	7	7	8	8	8	9	7	7	7	7·7	16 32	14	8 40	2
16	7	7	7	5	5	7	9	8	9	7	7	9	7·3	12 34	14	10 6	1
17	7	8	9	8	8	9	7	7	8	9	7	7	7·6	4 2	14	18 32	1
18	7	6	7	6	7	7	7	9	8	7	7	7	6·9	23 42	18	13 25	0
19	8	15	15	15	18	14	7	9	7	7	7	7	10·5	8 23	24	12 18	2
20	9	11	9	8	7	9	10	9	10	10	9	10	9·1	10 55	18	14 28	2
21	9	10	9	11	10	13	11	10	10	11	9	11	10·2	19 4	22	8 42	2
22	11	11	9	11	10	12	11	13	13	13	12	15	11·7	10 54	28	11 10	1
23	9	9	9	10	11	11	11	13	13	13	11	14	11·1	12 10	21	4 24	2
24	11	12	13	13	12	15	11	12	14	12	13	14	12·7	4 4	20	12 39	3
25	10	10	11	10	11	12	11	11	9	9	9	9	10·3	9 39	18	17 35	3
26	7	7	7	7	7	7	4	6	7	7	7	7	6·7	16 33	12	12 16	0
27	9	6	7	7	7	7	7	7	7	6	5	5	6·5	0 46	12	10 21	2
28	5	7	7	5	4	8	9	7	7	7	5	5	6·7	21 52	16	0 40	1
29	5	7	9	16	19	20	18	21	17	17	12	12	**14·1**	14 16	30	0 11	2
30	7	7	2	3	11	6	11	17	23	15	8	11	9·9	16 2	33	4 45	0
Mean ..	7·2	7·2	7·1	7·5	8·2	9·1	9·0	9·5	9·0	7·9	7·1	7·2	8·0				

* Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

JULY. (IN MILES PER HOUR.)

Date.	Hours.												* Mean.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	15	17	13	12	13	12	9	11	9	5	3	5	10·1	8 10	23	15 35	0
2	7	7	9	16	11	13	15	9	7	8	7	4	9·3	4 57	26	3 21	0
3	6	7	11	7	9	7	7	5	11	11	8	9	8·3	5 7	29	1 11	0
4	7	7	10	9	8	8	7	7	9	7	8	9	8·1	15 31	18	13 29	2
5	11	11	10	11	9	11	11	8	9	9	6	5	9·1	23 22	20	20 32	2
6	10	7	7	5	5	7	9	9	13	10	11	15	9·3	0 6	30	4 35	0
7	15	13	11	7	9	13	13	14	7	7	5	5	9·7	13 21	20	17 16	0
8	5	7	3	6	7	6	5	7	9	7	14	3	**6·3**	16 11	20	6 29	0
9	4	5	9	7	17	16	3	5	3	17	15	9	9·1	18 54	28	0 5	0
10	7	13	7	10	15	13	15	16	17	8	11	15	12·8	15 8	22	18 45	2
11	12	9	15	21	13	11	9	12	9	9	8	7	11·5	6 29	26	11 42	2
12	7	5	7	9	7	9	11	7	9	7	7	8	7·9	7 38	24	0 29	1
13	7	7	6	7	6	8	9	5	9	5	5	5	6·7	15 56	16	0 45	2
14	9	11	10	11	11	9	9	9	7	7	5	7	8·3	2 45	22	2 50	0
15	8	11	12	14	11	14	15	10	14	14	9	11	11·7	12 25	**39**	12 15	1
16	7	9	9	7	7	9	7	8	9	9	7	7	8·1	12 35	22	15 25	2
17	7	9	13	11	11	13	7	9	9	9	9	7	8·6	10 40	23	13 25	1
18	13	11	10	11	13	15	14	13	13	11	13	15	12·7	11 40	28	19 5	3
19	17	17	17	15	13	11	9	10	11	13	11	11	**12·9**	0 35	28	11 25	3
20	10	10	9	9	9	8	9	11	9	9	9	11	9·7	23 1	26	17 50	3
21	9	15	17	15	14	9	9	9	9	10	6	8	10·7	8 33	26	21 5	2
22	7	7	10	9	9	5	11	11	10	9	8	8	8·8	12 41	22	11 27	0
23	7	9	13	15	9	9	9	9	9	12	10	11	10·1	23 34	28	0 32	2
24	13	15	13	13	11	11	9	13	13	11	11	10	12·0	2 18	30	13 22	3
25	9	9	9	9	9	9	10	10	9	10	10	10	9·7	8 47	21	5 7	2
26	10	9	9	8	9	9	9	9	11	11	11	10	9·7	19 57	24	9 33	2
27	11	10	11	11	11	11	15	11	9	9	10	9	10·5	11 59	28	9 20	2
28	11	12	11	11	10	11	12	13	11	9	10	9	10·9	1 16	25	7 43	3
29	9	9	10	9	7	9	9	10	10	11	10	10	9·8	19 35	21	8 36	2
30	9	9	10	9	9	10	9	9	11	17	11	11	10·2	18 4	28	9 4	2
31	11	15	19	14	11	12	13	15	13	10	9	11	12·3	12 22	31	16 34	3
Mean ..	9·4	10·1	10·6	10·6	10·1	10·3	9·9	9·8	9·9	9·7	8·9	8·9	9·8				

AUGUST.

1	11	10	11	9	9	11	9	11	9	7	9	9	9·7	11 51	21	7 10	2
2	9	9	9	13	6	9	11	9	7	7	7	7	8·9	12 30	28	8 50	2
3	7	8	9	7	7	9	9	8	9	9	10	7	8·5	23 55	20	4 15	2
4	11	11	11	10	11	11	11	11	11	11	10	11	10·8	23 35	23	7 37	3
5	12	11	11	11	9	11	9	10	12	12	11	10	10·5	10 45	26	9 54	3
6	9	9	9	9	8	9	9	9	8	11	11	11	9·7	19 23	24	8 5	2
7	12	10	13	13	11	15	13	11	13	9	9	13	11·9	23 54	26	13 42	2
8	13	11	15	9	10	7	9	9	9	7	7	7	10·1	1 50	27	6 55	2
9	11	7	11	13	9	3	8	10	9	11	11	14	10·1	6 59	29	10 1	2
10	7	12	9	17	12	13	13	11	9	11	13	11	**12·1**	6 22	**30**	0 33	2
11	11	14	13	11	11	13	9	12	11	9	9	11	11·2	22 56	28	18 40	2
12	13	12	13	9	13	15	7	7	9	12	8	12	10·5	8 30	24	15 50	2
13	9	11	7	8	9	9	9	11	10	8	11	7	9·7	11 14	26	4 26	2
14	10	10	11	11	11	9	9	11	10	9	8	9	10·1	11 16	24	20 7	2
15	10	11	9	9	11	10	10	11	11	11	13	11	10·6	20 2	26	5 32	2
16	10	12	11	9	10	9	11	9	8	9	10	9	9·7	3 34	21	11 51	3
17	8	9	11	9	11	9	8	11	9	9	9	9	9·4	8 51	20	11 30	2
18	10	9	9	9	9	9	9	10	10	9	9	11	9·5	17 41	24	8 50	2
19	11	9	9	9	9	11	9	9	9	7	7	7	9·0	13 37	23	11 15	1
20	7	7	10	9	9	9	9	9	9	9	8	7	8·4	5 2	18	1 30	1
21	8	7	7	9	7	9	9	9	9	10	9	11	8·9	22 6	21	3 28	2
22	9	9	9	10	9	8	8	8	11	8	7	7	8·7	4 55	18	12 16	2
23	7	8	7	10	8	9	9	9	7	8	8	9	8·2	5 32	20	0 17	2
24	9	8	8	8	10	9	10	11	10	10	11	9	9·5	13 18	19	5 30	1
25	9	8	11	11	11	11	10	11	11	10	9	9	10·0	5 12	24	5 45	2
26	9	10	13	12	11	11	11	9	11	9	7	7	9·9	12 56	22	0 47	2
27	7	7	7	8	7	5	9	7	9	6	6	6	7·7	6 5	22	10 45	1
28	5	7	4	7	7	13	7	8	7	6	7	7	6·7	10 10	19	8 57	1
29	6	6	7	8	7	7	8	11	15	7	9	7	7·5	16 10	28	7 42	1
30	5	7	7	7	5	9	7	8	7	5	5	7	6·5	7 8	13	8 55	1
31	5	5	6	7	5	6	8	7	5	4	1	2	**5·1**	13 58	12	20 1	1
Mean ..	9·0	9·2	9·6	9·7	9·1	9·6	9·3	9·6	9·5	8·7	8·7	8·8	9·3				

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

SEPTEMBER. (IN MILES PER HOUR.)

Date.	Hours.												* Mean.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	3	5	3	1	3	5	5	5	6	5	3	1	3·9	4 49	12	5 55	0
2	1	1	2	7	6	1	4	5	7	4	3	1	3·5	8 39	10	2 17	0
3	3	2	3	3	2	4	6	7	7	7	5	2	4·3	17 8	11	8 16	0
4	3	3	3	3	3	3	7	7	6	6	5	6	4·6	14 55	12	8 24	0
5	7	5	7	5	4	3	7	7	5	7	6	6	5·5	15 26	12	9 38	0
6	5	5	5	6	8	6	7	8	7	6	5	5	6·0	6 50	16	6 35	1
7	6	5	3	1	5	6	7	6	7	5	5	3	4·7	13 51	11	5 49	0
8	5	3	3	9	7	3	4	7	7	7	5	3	5·0	15 53	12	4 40	0
9	3	3	5	4	3	4	3	2	1	5	6	7	3·8	19 11	9	9 38	0
10	7	8	10	1	12	9	3	5	3	3	7	4	5·9	9 12	18	6 43	0
11	1	9	8	7	7	9	3	5	2	5	6	7	6·1	14 55	18	17 35	0
12	7	7	5	7	4	5	7	2	3	1	6	5	4·5	3 59	11	14 43	0
13	3	3	2	3	6	3	3	4	7	5	3	3	3·9	11 38	14	4 25	0
14	2	2	2	5	6	3	5	7	6	5	3	2	3·8	14 10	10	22 24	0
15	2	1	3	3	3	3	5	7	7	3	1	3	**3·4**	16 5	14	0 0	0
16	3	5	2	1	2	2	6	7	7	3	2	3	3·7	16 55	12	8 33	0
17	2	5	3	5	5	1	7	7	5	3	1	3	3·7	14 23	12	4 20	0
18	9	7	3	5	5	7	5	6	7	3	2	6	4·8	2 38	12	21 30	0
19	5	3	6	7	7	9	6	11	9	9	10	3	6·9	18 56	22	3 16	1
20	1	15	8	5	5	8	13	23	21	24	23	19	**14·1**	20 14	**45**	0 0	1
21	21	15	14	17	15	14	11	13	11	9	3	3	11·6	0 43	29	23 40	0
22	4	5	4	5	5	5	7	9	8	7	5	7	6·0	14 55	13	12 52	2
23	5	5	5	5	5	6	5	7	4	3	1	2	4·5	1 22	11	19 12	1
24	3	3	3	7	5	4	4	5	6	5	3	1	3·9	16 28	9	10 14	1
25	1	1	1	7	3	1	5	7	7	7	5	4	4·5	18 23	12	11 0	1
26	3	2	3	3	3	6	7	7	9	6	5	5	4·9	16 50	12	5 21	0
27	5	5	4	5	5	7	8	9	8	9	5	5	6·5	15 53	16	22 22	2
28	5	5	9	5	7	9	9	11	10	7	5	3	7·2	15 23	18	3 40	2
29	4	3	3	3	3	7	7	9	7	5	3	3	4·9	13 35	12	8 8	2
30	3	3	3	3	3	1	7	7	7	5	3	2	4·1	13 47	11	4 40	1
Mean ..	4·4	4·8	4·5	4·9	5·2	5·1	6·1	7·4	6·9	6·0	4·8	4·2	5·3				

OCTOBER.

														H. M.		H. M.	
1	2	2	3	6	5	3	4	5	7	5	5	5	4·4	16 14	10	17 32	2
2	3	2	3	3	6	7	9	9	11	9	7	6	6·0	17 26	15	6 39	2
3	4	1	2	2	5	2	4	7	7	7	5	3	4·1	14 15	11	5 32	0
4	3	5	3	3	3	3	3	8	7	7	3	5	4·3	23 55	12	11 34	1
5	4	2	3	3	5	3	4	7	7	7	7	7	4·8	17 7	11	11 46	1
6	3	3	2	3	4	6	10	12	12	10	7	3	6·5	14 45	**20**	9 50	1
7	3	3	3	3	2	1	9	11	11	8	4	1	5·1	16 36	18	23 42	1
8	1	3	4	2	3	3	7	7	9	9	3	1	4·3	16 50	14	0 0	1
9	3	1	2	1	3	1	5	7	9	9	6	3	4·3	16 5	14	7 25	0
10	3	3	2	2	3	1	3	7	8	7	3	3	3·7	16 14	15	10 25	0
11	3	2	3	2	5	1	5	7	5	5	3	2	3·8	15 23	10	1 52	0
12	5	6	4	3	3	1	4	7	7	5	3	1	4·3	15 41	11	10 49	0
13	3	3	1	5	5	2	6	7	9	7	5	2	4·4	16 29	13	0 5	0
14	4	3	4	7	6	5	4	8	9	7	4	2	4·9	13 50	13	11 22	1
15	2	3	3	4	5	3	3	7	9	7	3	4	4·5	16 20	12	2 4	1
16	5	9	9	9	8	7	7	9	9	11	9	2	**7·3**	15 19	17	22 45	2
17	1	4	9	9	8	5	4	9	7	6	3	3	5·5	14 57	12	23 55	0
18	1	1	5	3	5	2	4	5	5	3	1	5	**3·3**	17 12	10	0 0	0
19	1	4	5	4	7	3	5	5	5	3	3	2	4·0	7 26	10	0 28	0
20	3	4	3	5	9	5	3	7	7	3	1	1	4·2	8 29	11	11 48	0
21	4	3	5	7	7	3	4	7	7	7	1	1	4·5	15 14	12	0 0	0
22	3	3	5	4	3	3	3	5	7	5	3	2	3·8	16 29	10	1 25	0
23	3	5	4	7	7	1	3	7	7	10	6	5	5·5	18 58	16	10 52	0
24	3	5	7	5	3	2	6	9	11	11	7	4	5·9	17 54	18	8 41	0
25	4	5	5	3	2	3	5	9	7	7	3	3	4·7	15 15	14	8 32	0
26	3	4	7	7	7	3	3	5	5	1	1	1	4·0	6 36	11	11 4	0
27	1	3	3	10	7	5	3	5	5	5	5	3	4·9	7 32	12	0 0	0
28	4	3	6	7	7	3	4	6	7	7	5	3	5·0	16 29	12	12 2	0
29	5	4	3	5	6	5	5	7	7	7	7	3	5·3	17 50	14	3 48	0
30	1	4	2	3	3	1	7	8	7	5	3	1	4·1	14 11	12	6 33	0
31	7	5	7	6	5	3	8	10	9	9	7	3	6·5	14 48	14	10 34	0
Mean ..	3·1	3·5	4·1	4·6	5·1	3·1	5·0	7·4	7·7	6·7	4·3	2·9	4·8				

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

NOVEMBER. (IN MILES PER HOUR.)

Date.	Hours.												* Mean.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Velocity.	Time.	Velocity.
														H. M.		H. M.	
1	2	3	3	3	4	2	5	9	7	11	9	5	5·4	17 54	16	10 38	0
2	5	4	9	6	7	6	4	7	9	7	5	5	5·9	16 23	14	5 45	1
3	3	4	7	7	6	2	5	7	8	9	7	7	6·1	17 8	16	0 20	0
4	4	5	7	5	4	7	7	7	8	9	9	3	6·0	16 47	15	5 35	0
5	3	4	5	4	4	1	5	8	8	8	7	4	4·9	14 33	14	5 9	0
6	3	3	3	2	3	2	5	5	8	7	4	3	4·3	16 16	12	7 47	0
7	5	3	3	3	3	1	6	9	9	9	4	3	4·9	16 15	16	2 44	0
8	1	5	5	4	3	1	5	5	7	8	3	5	4·5	14 55	12	0 0	0
9	5	5	3	3	7	3	1	6	7	7	5	3	4·5	15 44	11	5 22	0
10	3	3	9	6	3	2	5	7	7	7	5	5	5·2	4 22	12	0 0	0
11	3	3	4	7	4	3	4	7	8	9	5	4	5·2	16 56	16	1 7	0
12	2	4	7	7	7	3	4	6	8	9	9	4	6·1	18 58	14	0 32	0
13	5	8	7	7	7	7	4	7	11	12	10	4	**7·2**	19 30	**18**	13 35	1
14	5	7	5	3	4	5	5	7	10	9	5	3	5·5	17 23	15	23 28	0
15	5	9	7	5	8	5	5	6	9	7	5	3	6·1	16 52	13	23 10	1
16	3	7	7	9	6	3	5	4	5	7	7	5	5·7	18 53	12	11 36	0
17	6	2	2	4	5	3	7	7	9	7	7	3	5·1	16 1	13	2 46	0
18	4	3	3	5	4	1	6	7	5	5	3	1	3·9	15 39	10	5 36	0
19	1	5	2	4	5	2	7	7	7	7	5	3	4·5	15 16	12	0 11	0
20	1	3	5	3	7	3	7	8	7	7	5	4	5·0	12 52	13	2 50	0
21	3	3	2	5	4	4	9	10	11	9	6	4	5·7	16 5	17	3 58	0
22	1	4	3	3	5	5	4	7	7	5	1	5	4·3	14 12	12	0 32	0
23	5	5	6	5	3	1	3	3	5	1	0	2	3·4	5 51	9	18 40	0
24	2	3	3	3	3	1	7	7	5	3	2	3	3·5	15 11	10	4 52	0
25	3	3	3	1	3	3	1	6	5	4	2	1	**3·1**	15 11	10	0 0	0
26	1	3	3	3	5	5	5	7	11	9	7	3	4·9	16 24	18	0 0	0
27	3	3	4	3	2	2	7	8	9	9	6	3	5·0	16 39	14	8 38	0
28	4	4	3	5	2	3	5	7	7	5	3	5	4·4	17 3	11	7 14	0
29	3	1	3	3	5	3	3	7	5	7	7	4	4·3	5 43	12	0 34	0
30	3	5	5	5	3	4	5	7	8	7	4	4	5·1	15 51	13	23 3	0
Mean ..	3·2	4·1	4·6	4·4	4·5	3·1	5·0	6·8	7·7	7·3	5·2	3·7	5·0				

DECEMBER.

1	4	5	7	7	8	4	6	5	7	5	3	3	4·8	8 30	10	3 50	0
2	3	3	1	3	5	3	7	9	11	12	9	7	5·9	19 22	19	1 23	0
3	4	5	5	5	5	4	7	9	11	11	11	8	7·1	15 24	20	10 25	0
4	5	4	5	5	4	4	4	10	11	11	6	3	5·9	17 7	17	11 18	0
5	3	3	5	6	7	3	4	7	7	9	5	3	5·1	17 59	14	11 40	0
6	3	3	3	5	8	7	5	9	8	7	3	3	5·4	14 13	14	0 32	0
7	4	3	3	4	7	2	3	7	7	7	4	3	4·5	19 7	12	1 29	0
8	3	3	3	7	7	1	1	6	7	12	8	3	5·2	19 6	16	0 29	0
9	3	7	7	7	7	5	5	7	13	13	10	3	7·1	17 17	20	9 41	0
10	5	9	7	11	15	8	4	3	7	5	5	5	6·7	8 30	20	14 12	1
11	4	5	4	7	5	5	1	7	5	5	1	2	4·1	5 48	10	21 8	0
12	3	5	3	5	5	5	2	3	6	7	5	3	4·4	18 47	10	0 0	0
13	4	4	5	4	5	7	2	5	6	10	9	4	5·3	17 22	16	13 38	1
14	3	3	7	7	11	5	5	7	11	10	8	3	6·7	16 55	18	23 9	0
15	5	7	7	9	9	7	5	4	5	11	10	7	7·1	18 37	16	15 7	1
16	3	7	9	7	9	4	4	1	5	11	9	5	6·4	18 51	20	15 58	1
17	7	7	13	5	7	3	3	5	7	9	9	3	6·3	4 8	18	23 52	0
18	3	7	7	9	9	7	1	6	5	5	4	4	5·7	7 29	12	0 1	0
19	3	3	3	5	7	4	2	7	5	4	7	5	4·7	15 41	10	2 0	0
20	4	3	4	5	5	3	1	2	4	4	1	3	3·7	1 34	9	13 44	0
21	4	5	5	7	4	3	3	6	5	4	1	1	3·7	14 56	9	10 59	0
22	3	4	6	5	6	3	3	7	9	5	3	1	4·6	16 28	14	0 0	0
23	1	3	3	4	5	2	6	7	7	11	8	2	5·1	18 23	17	1 56	0
24	3	5	9	9	7	9	11	15	17	15	12	7	**9·7**	17 15	**26**	9 16	1
25	9	7	5	5	3	3	8	11	10	9	10	5	7·1	17 56	16	8 24	0
26	3	3	5	4	7	4	4	6	6	9	7	3	5·1	18 36	12	2 31	0
27	3	4	3	3	2	3	7	9	12	13	9	5	6·1	17 2	21	3 47	1
28	4	5	5	4	5	3	5	7	10	9	9	7	6·1	17 51	14	8 21	0
29	3	3	3	9	7	5	3	4	5	9	10	4	5·5	19 11	18	0 59	0
30	3	3	3	4	5	5	3	7	5	5	4	4	4·5	13 14	10	8 0	0
31	2	1	6	7	5	4	3	3	6	4	1	1	**3·5**	6 25	10	0 51	0
Mean ..	3·7	4·5	5·2	5·9	6·5	4·4	4·1	6·5	7·7	8·4	6·5	3·9	5·6				

*Derived from 24 hourly values.

The velocity at any hour represents the movement of wind during one hour from that hour to the next hour.

JANUARY.

Date.	Hours.												* Mean direction.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	NE	E	NE	E	ENE	ENE	NE	NW	NNW	NNW	N	ENE	NNE
2	ENE	ENE	E	ENE	ENE	ENE	ENE	NNW	NNW	NNW	N	NNE	NE
3	E	ENE	E	ENE	E	ENE	ENE	NW	NNW	NNW	N	NNE	NE
4	NNE	ESE	ENE	ENE	E	E	E	WNW	WNW	WNW	NNW	NE	ENE
5	ESE	E	ENE	E	E	E	E	WNW	WNW	WNW	Calm	WNW	ENE
6	SE	ESE	ESE	E	E	E	E	SSE	W	NW	NW	N	ENE
7	ENE	ESE	E	E	E	E	WNW	WNW	NW	NW	NW	NNE	NE
8	NNE	E	ENE	ENE	ESE	ESE	ESE	WNW	W	W	NNW	E	ENE
9	E	E	E	ESE	ESE	E	E	WNW	WNW	NNW	NNW	N	ENE
10	ESE	E	NE	ESE	NE	ESE	WNW	WNW	WNW	NNW	N	ENE	NNE
11	E	E	E	NNE	ENE	ENE	ENE	NW	NNW	NNW	NNW	N	NNE
12	N	N	N	N	N	NNW	NNW	NNW	NNW	NNW	N	NNE	N
13	NNE	N	NNE	NNE	ENE	ENE	NW	NW	NNW	NNW	N	NNE	N
14	NNE	NNW	NE	NNE	E	NW	NW	NW	NNW	NNW	N	N	N
15	NE	N	NE	NE	ENE	NW	WNW	NW	NNW	NNW	N	N	NNW
16	N	N	ENE	NE	E	ENE	NW	NNW	NNW	NNW	NNE	N	N
17	NE	N	NE	ENE	E	ENE	NNW	NNW	NNW	NNW	N	N	N
18	N	N	ENE	ENE	ENE	ENE	ENE	WNW	WNW	WNW	NNW	E	NNE
19	SE	SE	NE	NE	E	ESE	W	WNW	WNW	NW	NNW	E	NNE
20	E	ESE	ESE	NE	NE	NNW	NW	NW	NW	NW	NNW	NNW	NNW
21	NNW	NNE	NE	NE	ENE	NNW	NW	NW	NW	NNW	NNW	NE	NNW
22	NNE	NNE	NNE	N	NNE	NNW	NNW	NNW	NNW	NNW	N	NNE	N
23	NNE	NNE	NNE	ENE	ENE	NNE	NNW	NNW	NNW	NNW	NNW	N	N
24	N	NNE	E	ENE	ENE	NNW	NW	NW	NNW	NNW	N	N	N
25	N	N	ENE	ENE	ENE	NE	WNW	NNW	NNW	NNW	NNW	N	NNE
26	N	ESE	E	NNE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
27	NNE	NNE	NE	NE	ENE	NE	NW	NW	NNW	NNW	NNW	NNE	N
28	NNE	NNE	ENE	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNW	NE	N
29	NE	ESE	ESE	ENE	E	ENE	ENE	W	WNW	NNW	NE	NE	NNE
30	E	NE	ENE	ENE	E	E	E	WNW	WNW	WNW	NNW	ENE	NE
31	ESE	ESE	E	NE	ENE	E	E	WNW	WNW	WNW	WNW	WNW	NE
Mean direction.	NE	ENE	ENE	ENE	ENE	NE	NNW	NW	NW	NNW	NNW	NNE	N

FEBRUARY.

1	SE	SE	NE	ENE	E	E	NW	NW	NW	NNW	NNE	ENE	N
2	ENE	NNE	N	NNE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
3	NNW	NNE	NNE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNW	NNE	N
4	SE	SE	SE	ENE	N	ENE	ENE	NW	NW	NW	NW	NNW	NNW
5	NNW	NNW	NNW	N	NNE	ENE	NW	NW	NNW	NNW	NNW	N	NNW
6	NNW	N	N	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW
7	NNW	N	NNE	NNE	N	NW	NW	NW	NW	NW	NNW	NNW	NNW
8	NNW	N	N	N	N	NNW	NW	NW	NW	NNW	NNW	NNW	NNW
9	N	N	N	NNE	ENE	E	W	NW	NW	NW	NW	NW	NNW
10	NW	NNE	NNE	NNE	ENE	N	NW	NW	NW	NW	NW	NW	NNW
11	NE	NE	NE	E	E	NNW	NW	WNW	WNW	NW	NW	NW	NNW
12	NNE	ESE	ESE	ESE	E	ESE	ESE	NNW	NW	NW	NNW	NNE	ENE
13	NNE	NNE	NNE	NE	NE	NNW	NW	NW	NW	NW	NW	NNW	NNW
14	NNW	NE	ESE	ESE	ESE	ESE	W	W	W	WNW	WNW	WNW	WNW
15	WNW	SE	ESE	ESE	ESE	ESE	S	SSW	NW	NNW	NNW	NNW	SE
16	ENE	ENE	NNE	NNE	NE	NNW	NW	NW	NW	NW	NNW	NNW	NNW
17	NNE	NNE	NNE	NE	ENE	ENE	NW	NW	NNW	NNW	N	N	N
18	NNE	NNE	NNE	NNE	ENE	ENE	WNW	NW	NNW	NNW	N	N	N
19	N	NNW	NNW	N	ENE	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW
20	WNW	WNW	WNW	WN	ENE	NW	NW	NW	NW	WNW	WNW	WNW	NW
21	WNW	ENE	ESE	ESE	ESE	ESE	SW	W	W	WNW	WNW	WNW	S
22	WNW	SE	SE	SE	ESE	S	SSW	SW	SW	SW	WSW	WNW	SSW
23	W	W	NW	NW	NW	NNW	NNW	NW	NW	NNW	N	NNE	NW
24	NNE	NE	NE	NE	NNE	NNW	NW	NW	NW	NNW	NNW	N	NNW
25	NE	NE	NNE	NNE	NE	ENE	NW	NW	NNW	NNW	N	NNE	N
26	NNE	NE	ENE	ENE	ENE	NE	ENE	NW	NNW	NNW	N	N	NNE
27	NNE	S	ESE	ESE	ESE	ESE	W	W	W	NW	NW	NW	W
28	NW	NW	NW	NW	ESE	ESE	W	W	W	WNW	WNW	Calm	W
Mean direction.	NNW	NNE	NNE	NE	ENE	NNE	WNW	NW	NW	NW	NNW	NNW	NNW

*Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

MARCH.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	* Mean direction.
1	WNW	SE	SE	ENE	ENE	ENE	W	WNW	WNW	WNW	WNW	WNW	WNW
2	WNW	WNW	WNW	SSE	E	E	WNW	WNW	WNW	WNW	NW	NW	WNW
3	NW	NW	NNE	NE	ENE	ESE	NW	NW	NW	NNW	N	NNE	NNW
4	NW	N	NNW	NNE	N	NW	WNW	WNW	NW	NW	NNW	ESE	NNW
5	SSW	SSE	SSE	SSE	SSE	SSW	WSW	W	WNW	W	W	W	SW
6	W	W	SSE	SSE	SSE	W	WNW	WNW	WNW	NW	NW	NW	WNW
7	NNW	NNW	N	NE	NE	NW	NW	NW	NW	NW	NNW	N	NNW
8	N	N	N	N	N	NW	NW	NW	N	NNW	NNE	NE	N
9	ESE	NNW	NNE	ENE	ENE	ENE	W	WNW	WNW	N	ENE	N	N
10	N	ESE	SE	SE	SE	SE	WNW	WNW	NW	NW	NNW	N	NW
11	N	N	NNE	NNE	N	ENE	NW	NW	NW	NNW	NNW	NNE	NNW
12	NNE	NNE	NNE	E	ENE	ENE	WNW	WNW	WNW	NNW	NNW	NE	N
13	NNE	N	N	N	ENE	NW	NW	WNW	NW	NNW	NNW	NNW	NNW
14	NNW	NW	NNW	NE	ESE	ESE	WNW	WNW	WNW	WNW	SSW	SSW	WNW
15	WNW	WNW	WNW	S	S	SSW	SW	WSW	WNW	WNW	WNW	S	SW
16	SSW	SSE	SSE	SE	SE	SE	WNW	NW	NW	NNW	NNW	NNW	NW
17	NNW	N	N	N	ESE	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW
18	NNW	NNW	N	NNE	E	E	NW	WNW	NW	NW	NNW	NNW	NNW
19	SW	SW	WNW	WNW	WNW	NW	WNW	WNW	NW	NW	NW	NW	WNW
20	NW	NW	NNW	NNE	NNE	WNW	WNW	NW	NW	NNW	NW	NW	NW
21	NW	NNW	NNE	E	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW
22	NNW	NNW	ESE	SSE	ESE	SSE	W	W	WNW	NW	NNW	N	W
23	NW	Calm	SW	WSW	SE	SE	WNW	WNW	WNW	WNW	NW	SE	WNW
24	NNE	N	NW	NNW	ENE	NW	NW	NW	NW	NW	NNW	WNW	NW
25	WNW	NNW	NNW	NNW	NNW	ESE	W	WNW	WNW	WNW	SSE	SSE	WNW
26	W	NNW	ENE	E	E	E	W	W	W	WNW	SSW	SSW	SW
27	SSW	SSW	SSW	ESE	E	E	W	W	W	SW	SSW	SSW	SW
28	S	S	SSW	SE	SE	WSW	WNW	WNW	WNW	WNW	WNW	WNW	SW
29	SSW	S	S	S	E	WNW	WNW	NW	NW	NW	NW	NW	WNW
30	NNW	NE	NE	NE	ESE	WNW	WNW	NW	NW	NW	WNW	NNW	NW
31	NW	NW	ESE	S	S	WSW	W	WNW	WNW	WNW	NW	NNE	W
Mean direction.	WNW	NNW	NNE	E	E	WNW	WNW	WNW	NW	NW	NW	NNW	NW

APRIL.

1	NW	N	SSE	S	SSW	W	WNW	WNW	WNW	WNW	W	W	W
2	W	SSW	SW	ESE	ESE	NW	W	WNW	WNW	NNW	NNW	NNW	WNW
3	N	N	N	NW	ENE	NNW	NNW	NW	NNW	NNW	NNW	NNW	NNW
4	NNW	NNW	N	E	E	SSE	WSW	W	W	NW	NNW	NNW	NW
5	NW	WNW	WNW	WNW	NW	WNW	W	W	W	WNW	NW	NW	WNW
6	NW	WNW	WNW	ESE	ESE	ESE	W	W	W	WNW	WNW	NW	W
7	NW	NNE	NNE	NNE	N	NW	NW	NW	NW	NW	NW	WNW	NW
8	WNW	WNW	NNE	NNE	N	NW	NW	NNW	NW	NNW	NNW	NNW	NNW
9	NNW	N	NW	NNE	ENE	WNW	WNW	WNW	NW	NW	NNW	Calm	NW
10	NW	NW	NNW	NE	N	NW	NW	NW	NW	WNW	WNW	WNW	NW
11	NW	NNW	NNE	NE	NNW	NW	NW	NW	WNW	WNW	WNW	NW	NW
12	NNW	NE	NNE	NE	N	NNW	NW	NW	NW	NNW	NW	NW	NNW
13	NNW	NNW	NNE	NE	ENE	NW	NW	NW	NW	WNW	NW	NW	NNW
14	NW	NNW	NNE	ENE	ENE	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW
15	NNW	NNW	NE	E	ESE	WSW	W	WNW	NW	NW	NW	NNW	NW
16	NNW	NNE	NNE	NNE	NNW	NW	NW	NW	NW	NW	NW	NW	NW
17	NW	NW	NNW	NNE	ENE	WNW	WNW	NW	NW	NW	NW	NW	NW
18	NW	NW	NNW	NNW	NW	NW	WNW	WNW	WNW	WNW	WNW	NW	NW
19	NW	NNW	NNE	NE	NE	NW	NW	NW	NW	NW	NW	NW	NW
20	NNW	NNW	N	NE	E	WNW	WNW	NW	NW	NW	WNW	WNW	NW
21	NW	NNW	NNE	NNE	ESE	ESE	W	WNW	WNW	NW	NW	NW	NW
22	NW	NW	NNW	ESE	SE	W	W	WNW	WNW	NW	NNW	NNW	NW
23	NNW	NNW	NNW	NNW	W	W	WNW	NW	NW	NW	NNW	NNW	NW
24	N	NE	SE	SE	SSW	WSW	W	W	WNW	WNW	NW	NW	WNW
25	NNW	NNE	NNE	NNE	NNW	NW	NW	NW	NW	WNW	W	W	NW
26	WNW	WNW	NW	NNW	NNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
27	NNW	NNW	NW	NNW	NW	NW	NW	NW	WNW	WNW	NW	WNW	NW
28	NW	NNW	NNW	NE	N	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW
29	NW	NW	NNE	NNE	ESE	WSW	W	W	WNW	WNW	WNW	WNW	WNW
30	NNW	NNW	NNE	NNE	SE	SW	W	W	W	WNW	WNW	WNW	WNW
Mean direction.	NW	NNW	N	NE	NNE	WNW	WNW	WNW	WNW	NW	NW	NW	NW

* Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

MAY.

Date.	Hours.												* Mean direction.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	WNW	NW	NNW	NE	ESE	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW
2	NW	NNW	NNW	NE	NNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	NW
3	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	W	WNW
4	W	WNW	WNW	WNW	W	W	W	W	W	WNW	W	W	W
5	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
6	WNW	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
7	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
8	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	W	W	WNW
9	WNW	WNW	WNW	WNW	WSW	WNW	W	W	WNW	W	WNW	W	W
10	W	W	W	ESE	ESE	WNW	WNW	WNW	W	NW	NW	NNW	WNW
11	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NNW	NNW	NW
12	NNW	NNE	NE	NE	NNW	NW	NW	NW	NW	WNW	WNW	NW	NNW
13	WNW	WNW	WNW	WSW	SSW	SSW	SSW	WSW	WSW	WSW	WSW	WSW	WSW
14	WSW	WSW	WSW	W	WSW	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW
15	W	WSW	WSW	W	WSW	WSW	W	W	W	W	W	W	W
16	W	W	W	W	WNW	W	W	W	W	WNW	WNW	WNW	W
17	WNW	WNW	Calm	WNW	S	WNW	W	WNW	WNW	WNW	WNW	W	WNW
18	WSW	W	W	W	SW	SW	WSW	WSW	W	W	W	WSW	WSW
19	SW	W	SW	W	SSW	SW	WSW	W	W	W	SW	SSW	WSW
20	SSW	SW	WSW	SSW	S	SSW	SW	SW	W	W	WSW	SW	SW
21	WSW	W	W	W	SSW	SW	WSW	WSW	W	W	W	WNW	WSW
22	NW	NW	NNW	NNE	ENE	WNW	WNW	WNW	WNW	WNW	NW	NW	NW
23	NNW	NNW	NE	ENE	NNW	NW	NW	NW	NW	NW	NW	NW	NW
24	NNW	NNW	NNW	NNW	NNW	WNW	W	WNW	NW	NW	NNW	NNW	NW
25	NNW	NNW	NW	NW	W	W	WNW	WNW	WNW	WNW	NW	NW	WNW
26	NW	WNW	W	W	WSW	WSW	W	WNW	WNW	NW	NW	NW	WNW
27	N	NE	NW	NW	WNW	WNW	WNW	NW	WNW	NW	NW	NW	NW
28	NNW	NW	WNW	WSW	WNW	W	W	WNW	W	WNW	WNW	NW	WNW
29	NW	NW	NNW	NNW	NW	WNW	WNW	NW	NW	NW	NW	NW	NW
30	NNW	NNW	NNW	WNW	W	W	W	W	WNW	WNW	NW	NW	WNW
31	NNW	NNW	NNW	NE	WNW	WNW	WNW	W	WNW	WNW	NW	NNW	NW
Mean direction.	NW	NW	NW	NW	WNW	W	W	WNW	WNW	WNW	WNW	WNW	WNW

JUNE.

1	NNW	NNW	NW	NW	SW	SW	SW	WSW	WSW	W	WSW	WSW	WSW
2	W	W	W	SSW	SSW	SSW	SSW	WSW	W	W	W	SW	SW
3	SSW	SW	S	S	S	SSW	SW	W	W	WNW	WNW	WNW	WSW
4	WNW	WNW	WNW	WNW	NW	WSW	W	W	W	W	WNW	WNW	W
5	WNW	WNW	WNW	WNW	WNW	WSW	W	W	W	W	W	W	W
6	W	W	W	WNW	W	W	W	WNW	WNW	WNW	WNW	W	W
7	W	W	W	W	W	WNW	W	W	W	WNW	W	W	W
8	W	W	W	W	W	W	WNW	WNW	W	W	WNW	W	W
9	W	WSW	WSW	WSW	SW	W	W	W	W	W	WSW	WSW	W
10	WSW	SW	WSW	WSW	SW	WSW	WSW	W	W	WSW	WSW	SSW	WSW
11	SW	SSW	SSW	SSW	S	S	SSW	SSW	SW	SW	SSW	SSW	SSW
12	S	S	SSE	SSE	SSE	S	NW	WSW	WNW	WNW	W	WSW	S
13	W	W	W	SE	ESE	ESE	S	W	SW	SSW	SSW	SSW	S
14	SW	SSW	W	SSE	W	W	W	W	W	W	W	W	W
15	W	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	W	W	WNW
16	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW
17	W	W	W	W	W	W	W	W	W	W	W	W	W
18	WSW	WSW	WSW	WSW	WSW	WSW	SW	W	W	WSW	WSW	SW	WSW
19	SW	SSW	SSE	SSE	S	SW	WSW	SW	WSW	WSW	WSW	WSW	SSW
20	W	W	W	WSW	SW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW
21	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW
22	SW	SW	SW	SW	WSW	WSW	W	W	W	W	W	W	WSW
23	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	W	W	W
24	W	W	W	W	W	W	W	W	W	W	W	W	W
25	W	W	W	W	W	W	W	W	WNW	WNW	WNW	WNW	W
26	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	W	W	W
27	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W
28	WSW	WNW	WNW	WNW	W	W	W	WNW	W	W	WSW	WNW	W
29	W	WSW	SSE	SSE	SSE	S	S	S	S	S	S	S	S
30	SSW	SW	S	W	SSE	SSW	SW	W	W	W	W	W	WSW
Mean direction.	WSW	WSW	WSW	SW	SW	WSW	WSW	W	W	W	WSW	WSW	WSW

* Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

JULY.

Date.	Hours.												*Mean direction.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	W	W	W	W	WNW	W	W	W	W	W	W	WSW	W
2	W	W	N	ESE	ESE	SE	SSE	S	SSW	SSW	SW	S	SSE
3	S	NW	SSE	WSW	N	ESE	NE	WNW	W	W	W	W	W
4	W	W	W	W	W	W	W	W	W	W	W	W	W
5	W	W	W	W	W	W	W	W	W	W	WSW	WSW	W
6	SSW	SSW	ESE	W	W	W	W	W	SSE	SSE	S	S	SSW
7	SSE	SSE	S	SSE	S	S	S	S	SSW	W	WSW	SW	S
8	WSW	W	W	SSE	WNW	W	W	W	WNW	ESE	SE	NNE	WSW
9	SSE	SE	SE	SW	SSE	SSW	WNW	WNW	WSW	S	S	SSW	S
10	SSW	SSE	SSW	WSW	SSE	S	S	S	S	WSW	S	SSE	S
11	SSE	S	S	SSE	SSW	SW	SW	SSW	SSW	WSW	SW	SW	SSW
12	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
13	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W	W	WSW	WSW	WSW
14	W	W	W	W	W	W	W	W	W	W	W	W	W
15	W	W	W	W	W	W	WNW	WSW	W	W	W	W	W
16	WSW	WSW	WNW	W	WSW	WSW	SW	WSW	SW	WSW	SW	SW	WSW
17	SW	WSW	W	W	W	WNW	W	W	W	W	W	WNW	W
18	W	W	W	W	W	W	W	W	W	W	W	W	W
19	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
20	WNW	WNW	WNW	W	WNW	WNW	W	WNW	W	W	W	W	W
21	W	W	WNW	W	W	W	W	W	W	W	WSW	W	W
22	W	W	W	WNW	WNW	WSW	W	W	W	WSW	WSW	W	W
23	WSW	WNW	W	W	WSW	WSW	WSW	WSW	WSW	W	WSW	W	W
24	W	W	WSW	WSW	W	W	W	W	W	WSW	WSW	WSW	W
25	WSW	WSW	WSW	W	WSW	WSW	W	W	W	WSW	WSW	WSW	WSW
26	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	W	W	W	WSW	WSW
27	WSW	W	W	W	WSW	WSW	W	W	W	WSW	WSW	WSW	WSW
28	W	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW
29	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
30	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW
31	WSW	W	W	W	W	W	W	W	W	WSW	WSW	WSW	W
Mean direction.	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW

AUGUST.

1	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
2	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	WSW
3	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW
4	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
5	SW	WSW	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
6	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
7	WSW	W	W	W	W	W	W	W	W	WNW	WNW	W	W
8	WNW	WNW	WNW	W	W	WNW	W	WSW	W	W	WSW	WSW	W
9	W	W	W	W	W	WNW	W	W	W	W	W	W	W
10	W	W	W	W	W	W	W	WNW	W	WNW	W	W	W
11	W	W	W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	W	W
12	W	W	W	W	W	W	WSW	WSW	W	W	WSW	WSW	W
13	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	WSW	WSW
14	W	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	W	W	WSW	WSW
15	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	W	WSW	WSW
16	WSW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW
17	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	WSW	SW
18	SW	WSW	WSW	WSW	SW	SW	SW	SSW	SW	SW	WSW	WSW	SW
19	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
20	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
21	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WNW	WSW
22	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	W	W	WSW	WSW	WSW
23	WSW	WSW	SW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
24	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W	W
25	W	WSW	W	W	W	WSW	W	W	W	WSW	WSW	WSW	W
26	WSW	WSW	W	W	WSW	W	W	WSW	W	W	WSW	WSW	W
27	WSW	WSW	W	W	WSW	W	W	WNW	W	W	WSW	SW	W
28	WSW	WSW	W	W	W	W	W	W	WSW	WSW	WSW	WSW	W
29	WSW	WSW	W	WSW	WSW	WSW	W	W	W	W	W	W	W
30	W	W	W	W	W	W	W	W	WNW	WNW	W	W	W
31	W	WSW	W	W	W	W	W	W	WNW	WNW	WNW	W	W
Mean direction.	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW

*Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

SEPTEMBER.

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	*Mean direction.
1	WSW	W	W	WSW	WSW	WSW	W	W	WSW	W	W	WSW	W
2	WSW	WNW	W	S	SSE	NW	WSW	W	W	W	W	WSW	WSW
3	SW	SW	WSW	W	SW	WSW	WNW	WNW	WNW	WNW	W	W	W
4	W	WSW	W	W	WSW	WSW	WSW	W	W	W	W	WSW	W
5	W	W	WNW	WNW	WNW	WSW	W	W	WSW	WSW	W	W	W
6	W	WSW	WSW	WSW	W	WSW	W	W	W	W	WNW	WNW	W
7	WNW	WNW	WNW	Calm	SSE	W	W	W	W	W	W	W	W
8	WNW	WNW	WNW	ESE	SE	SE	WSW	WNW	WNW	WNW	WNW	NNW	W
9	WNW	WNW	WNW	WNW	WNW	SSE	WNW	WNW	SE	SE	SE	SE	SSW
10	SE	S	ESE	W	ESE	ESE	SSE	NNW	NNW	NNE	SE	SSW	SE
11	SW	ESE	SE	SE	SE	SSE	N	W	WSW	ESE	SSE	SSE	SE
12	S	W	W	SSW	SSE	ESE	ESE	ENE	SE	S	SE	SE	SSE
13	SSE	S	W	W	SE	SSE	SSW	W	W	WNW	WNW	WNW	WSW
14	WNW	WNW	WNW	SE	SE	W	WNW	WNW	WNW	WNW	WNW	NNW	WNW
15	NNE	NNE	E	E	E	E	WNW	NW	NW	NW	NW	S	NNW
16	WSW	WNW	NW	NW	ENE	SE	WNW	WNW	NW	NNW	NE	ENE	WNW
17	W	WNW	NNW	WNW	WNW	WNW	W	W	W	W	W	W	W
18	SE	S	SSW	S	SSW	SSW	WSW	WSW	WNW	WNW	WNW	SSE	SW
19	S	S	SSE	S	S	SSW	WSW	WNW	WNW	NW	NNW	NNE	WSW
20	NNE	NW	NNW	NNE	WNW	WNW	WNW	W	W	WNW	WNW	WNW	WNW
21	WNW	WNW	W	W	W	W	W	W	W	W	W	WNW	W
22	W	W	W	W	WSW	W	WSW	W	W	W	WSW	WSW	W
23	WSW	WSW	WSW	W	W	W	W	W	WNW	WNW	WNW	WNW	W
24	WSW	WSW	WSW	S	SSW	WSW	W	WNW	WNW	NW	NW	NW	W
25	NW	NW	NW	ESE	ESE	ESE	WNW	WNW	NW	NW	NW	NW	NW
26	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW
27	WNW	WNW	WNW	NW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW
28	WNW	WNW	NNW	WNW	NNW	NW	NW	NNW	NW	NW	NW	NW	NW
29	NW	NW	NW	NE	NE	NNW	WNW	WNW	WNW	NW	NW	NW	NW
30	NW	NW	NW	NW	NW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
Mean direction.	W	W	W	WSW	SW	WSW	W	WNW	WNW	WNW	WNW	W	W

OCTOBER.

1	WNW	WNW	WNW	SSE	SSE	WSW	W	WNW	WNW	NW	NW	NNW	WNW
2	NNW	NE	NE	NE	ENE	NW	NW	NW	NW	NW	NNW	NNW	NNW
3	NW	NW	NW	NW	ESE	ESE	WNW	WNW	WNW	WNW	NW	NW	WNW
4	NW	NNW	NNE	ENE	ESE	ESE	W	W	WNW	NW	NW	NW	NW
5	NNW	NNE	E	ENE	ESE	ESE	WNW	WNW	NW	NW	NNW	NNW	NNW
6	NNE	ENE	ENE	ENE	ENE	NNW	NW	NW	NNW	NNW	NNW	NNW	NNW
7	NNW	NNW	NE	NNE	NNW	NNE	NW	NW	NNW	NNW	NNW	NNW	NNW
8	NNW	NNW	NNW	NNW	ESE	ESE	NNW	NW	NNW	NNW	N	N	NNW
9	N	N	ENE	ENE	SE	SE	NW	NW	NNW	NNW	N	NE	NNW
10	NE	ENE	ENE	ENE	ENE	ENE	NNW	NNW	NNW	NNW	NNW	NNW	N
11	NNW	NNW	NNW	NNE	ENE	S	NW	NW	NNW	NNW	NNW	NNW	NNW
12	NNW	NNW	NNW	NE	ESE	ESE	NW	NW	NW	NW	NW	WNW	NNW
13	WNW	NNW	NNW	E	ENE	NNE	NNW	NW	NNW	NNW	NNW	NNW	NNW
14	SSW	WNW	N	E	ENE	ENE	NNW	NNW	NW	NNW	NNW	NNW	N
15	NNW	E	E	NNE	ENE	ENE	WNW	WNW	NW	NNW	N	NE	N
16	NE	ENE	ENE	ENE	ENE	ENE	WNW	NW	NW	NNW	NNW	N	NNE
17	N	ENE	ENE	ENE	ENE	ENE	S	W	WNW	N	NNW	NNE	NNE
18	NE	NE	ENE	NE	ENE	ENE	WSW	W	WNW	ESE	NW	NW	NNE
19	ESE	ESE	ENE	ENE	ENE	ENE	WNW	WNW	WNW	NW	N	N	NNE
20	ENE	ENE	NE	NE	ENE	ESE	SSW	WNW	WNW	WNW	WNW	WNW	NNE
21	WNW	ESE	ENE	ENE	ENE	ENE	WNW	NW	NNW	WNW	NW	NE	NNE
22	ESE	ESE	ESE	ENE	ESE	ESE	WSW	W	WNW	WNW	NE	NE	ENE
23	ENE	E	NE	E	E	E	E	WNW	NW	NNW	NNW	N	NNE
24	ENE	ENE	ENE	ENE	ESE	ESE	WNW	NNW	NW	NNW	NNW	N	N
25	NE	ENE	E	E	E	E	WNW	WNW	NW	NNW	NNE	NNE	N
26	NNE	ENE	ENE	ENE	ENE	ENE	WNW	WNW	WNW	NW	NW	NW	NNE
27	NNW	ENE	ENE	E	ESE	ESE	WNW	WNW	WNW	NW	NNW	NNE	NE
28	ENE	ENE	ENE	E	E	ENE	WNW	WNW	NW	NNW	NNW	NNW	NNE
29	NNW	NNE	NE	ENE	ENE	ENE	WNW	WNW	NW	NW	NNW	NNW	NNW
30	NNW	NNW	NNW	NNW	ENE	E	WNW	WNW	WNW	WNW	WNW	WNW	NW
31	ESE	ESE	ESE	E	E	WNW	WNW	WNW	NW	NW	NNW	NNW	NNW
Mean direction.	N	NE	NE	ENE	E	ENE	WNW	WNW	NW	NW	NNW	NNW	N

* Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

NOVEMBER.

Date.	Hour.												*Mean direction.
	0	2	4	6	8	10	12	14	16	18	20	22	
1	NNW	NNW	NNE	NNE	E	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW
2	NNE	NE	E	ENE	ENE	ENE	ENE	WNW	NW	NW	NNW	NNE	NNE
3	ENE	E	ENE	ENE	ENE	N	NW	NW	NNW	NNW	NNE	E	NNE
4	NE	E	E	ENE	ENE	NW	NW	NW	NNW	NNW	NNW	N	N
5	NE	ENE	NW	ENE	ENE	ENE	NW	NW	NNW	NW	NNW	NNE	N
6	NNE	NNE	NE	ENE	ENE	ENE	NW	NW	NNW	NNW	NNE	NE	N
7	E	E	E	E	E	E	NW	NNW	NNW	NNW	NNE	NNE	N
8	ENE	NW	NNE	ENE	E	W	WNW	NW	NW	NNW	ENE	ESE	N
9	ESE	ESE	ENE	ENE	E	E	E	NW	NW	NNW	NNE	NNE	NNE
10	ESE	ESE	ENE	SE	SE	W	WNW	NW	NW	NNW	NNW	NNW	N
11	NNE	E	NE	ENE	ENE	ENE	NW	NW	NW	NNW	NNW	N	N
12	E	E	ENE	ENE	ENE	ENE	ENE	NW	NW	NNW	NNW	ENE	NNW
13	NE	ESE	ESE	E	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNE	NNE
14	NNE	E	E	ENE	ENE	E	E	NW	NNW	NNW	NNW	NNE	NNE
15	E	ESE	ESE	ENE	ENE	ENE	NW	WNW	NW	NW	NW	NW	NNE
16	NW	NW	ESE	ESE	ESE	S	WNW	WNW	NW	NNW	N	N	NNE
17	ENE	E	NNE	ENE	E	E	NW	NW	NNW	NNW	NNW	NNW	N
18	N	ENE	ENE	ESE	ESE	E	WNW	WNW	WNW	NW	NW	NW	NNW
19	NW	E	ESE	E	E	E	WNW	WNW	WNW	NW	NNW	NNW	NNW
20	NNW	NE	ESE	ESE	E	E	NW	WNW	NW	NW	NNW	NNW	NNW
21	NNW	NNE	ENE	ENE	ENE	NNW	NW	NW	NNW	NNW	NNW	N	NNW
22	N	ESE	ENE	ENE	ENE	ENE	ENE	WNW	NW	NNW	ENE	ESE	NE
23	ESE	ESE	ESE	ESE	ESE	ESE	WSW	WSW	WNW	WNW	Calm	WNW	SE
24	WNW	WNW	ENE	ENE	ENE	NW	WNW	WNW	WNW	WNW	NNW	E	NW
25	E	ESE	E	N	ENE	E	E	WNW	WNW	WNW	WNW	WNW	N
26	WNW	NE	NE	NE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
27	ENE	ENE	NNE	ENE	ENE	ENE	NW	NW	NW	NNW	NNW	N	N
28	ESE	ENE	ENE	E	E	NW	WNW	NW	NW	NNW	NNW	ESE	N
29	ESE	ESE	NNE	ESE	E	E	E	WNW	NW	NNW	NNW	ENE	NE
30	ENE	ENE	ENE	NE	ENE	ENE	NW	NW	NW	NNW	NNW	NNW	N
Mean direction.	ENE	E	ENE	ENE	E	ENE	NW	NW	NW	NNW	NNW	NNE	N

DECEMBER.

1	ESE	ESE	ESE	ESE	E	E	WNW	WNW	WNW	NW	NNW	NNW	NE
2	NNE	E	E	E	E	E	WNW	NW	NNW	NNW	NNW	NNE	N
3	NNE	NNE	NNE	NE	NNE	ENE	NW	NNW	NNW	NNW	NNW	N	N
4	NNE	NNE	NNE	NNE	NE	ENE	NW	NNW	NNW	NNW	N	NNE	N
5	NNE	NNE	NE	ENE	ENE	ENE	WNW	NW	NNW	NNW	NNW	NNE	N
6	NNE	NNW	ENE	ENE	E	E	NW	NNW	NNW	NNW	N	NE	NNE
7	NE	NE	NE	ENE	E	E	E	WNW	WNW	NNW	NNE	NNE	NNE
8	E	E	E	E	E	E	E	WNW	NW	NNW	N	NNE	NNE
9	NNE	ENE	E	ESE	ESE	ENE	ENE	NW	NNW	NNW	N	NNE	NNE
10	ENE	E	E	ESE	ESE	ESE	ESE	ESE	WNW	NW	N	NNE	E
11	NE	NNE	NNE	ESE	ESE	ESE	ESE	W	WNW	NW	NW	NNE	NNE
12	NNE	ENE	ENE	ENE	E	ENE	ENE	NW	NW	NNW	NNE	NNE	NE
13	ENE	NE	NNE	NNE	ENE	ENE	ENE	NW	NNW	NNW	NNW	NNE	NNE
14	E	ENE	ENE	ENE	E	ENE	ENE	NW	NNW	NNW	NNW	N	NE
15	ESE	E	E	E	E	E	E	ENE	NNW	NNW	NNW	NNE	NE
16	NNE	E	E	ENE	E	E	ENE	ENE	NW	N	N	NNE	NE
17	E	E	ESE	E	ENE	ENE	NW	WNW	NW	NNW	N	N	NE
18	ENE	ESE	ESE	ESE	ENE	ENE	E	WNW	WNW	WNW	NW	N	NE
19	NNW	E	E	E	E	E	E	W	W	WNW	NNW	NNE	NNE
20	ENE	NE	ENE	ENE	ESE	E	E	E	NW	NW	NW	NNE	NE
21	ENE	ENE	ENE	ENE	E	E	W	WNW	WNW	NW	Calm	NW	NNE
22	NW	NW	ENE	E	ESE	ESE	WSW	W	NW	NW	NW	NW	NNW
23	NW	NNE	NNE	ENE	ENE	ENE	NW	NW	NW	NNW	N	NNE	N
24	NNE	NNW	N	N	N	NNW	NNW	NNW	NNW	NNW	N	NNE	N
25	N	NNE	NNE	N	NNE	NNW	NW	NNW	NNW	NNW	NNW	N	N
26	N	NE	ENE	NE	ENE	ENE	NW	NW	NW	NNW	N	N	N
27	N	N	N	NE	NE	NW	NW	NW	NNW	NNW	N	N	NNW
28	NNE	NNE	NNE	NNE	ENE	ENE	NW	NW	NNW	NNW	NNW	NNE	N
29	NNE	NNE	ENE	E	E	ENE	ENE	W	NW	NNW	NNW	NNE	NNE
30	NNE	NNE	ENE	NE	ENE	ENE	ENE	WNW	NW	NNW	N	N	N
31	N	N	ESE	E	E	ENE	ENE	WSW	W	NW	NW	NW	NE
Mean direction.	NE	NE	ENE	ENE	E	ENE	NNW	NW	NW	NW	NNW	ENE	NNE

* Derived from 24 hourly values.

The direction at any hour represents the prevailing direction between that hour and the succeeding hour.

JANUARY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.†												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	70·6	70·8	68·4	68·9	68·9	74·1	80·3	83·5	79·3	74·8	73·4	70·8	73·7	13 50	84·1	4 12	67·7
2	70·6	69·9	68·5	67·8	69·5	74·3	80·1	83·7	79·9	75·2	73·9	71·3	73·7	13 54	84·7	4 44	67·3
3	69·0	68·5	68·3	67·3	68·9	73·7	79·6	82·8	78·8	74·7	73·6	71·8	73·0	13 50	83·7	6 20	67·2
4	69·6	68·8	68·1	67·5	69·4	73·9	78·6	81·7	81·0	75·8	73·7	71·8	73·4	13 30	82·5	6 38	67·3
5	71·1	70·0	69·0	67·6	69·1	73·3	78·2	81·6	80·8	76·4	73·0	72·3	73·4	13 34	82·0	6 54	67·1
6	72·0	70·0	69·5	68·5	69·3	72·9	78·8	81·9	81·5	76·4	74·3	72·1	73·8	14 40	82·4	7 9	67·4
7	70·9	71·1	70·9	69·9	69·6	73·7	78·5	80·4	79·2	76·0	74·2	72·2	73·7	14 14	80·9	6 56	68·2
8	71·3	71·6	70·0	69·8	70·6	74·3	80·5	82·0	81·2	77·1	75·1	73·3	74·7	14 18	82·5	4 44	69·4
9	72·5	71·8	71·4	71·3	71·7	75·3	80·8	82·9	82·0	77·7	75·7	73·3	75·5	13 30	83·3	6 44	70·5
10	73·2	71·3	71·8	70·7	71·3	75·9	80·6	82·0	81·6	77·5	76·0	73·5	75·5	14 17	83·1	6 40	69·6
11	72·8	72·3	71·4	70·4	70·6	74·2	80·3	81·2	78·8	75·7	74·8	74·3	74·8	12 55	82·9	6 50	69·5
12	72·8	72·4	72·6	70·9	70·7	74·4	77·9	77·4	76·5	75·0	74·2	72·5	73·9	13 0	79·2	7 4	69·8
13	70·9	69·3	67·7	66·8	68·9	75·1	78·4	79·2	77·4	74·7	74·6	74·1	73·1	14 18	79·6	5 48	66·5
14	72·1	71·7	72·0	70·5	72·1	76·8	78·6	80·4	78·8	75·6	74·7	74·0	74·8	14 10	80·8	6 42	69·4
15	73·9	73·2	72·6	71·6	73·5	77·9	79·4	81·0	78·9	75·6	75·5	74·3	75·6	13 26	81·8	6 54	71·0
16	73·4	72·1	71·7	70·9	73·4	77·7	81·5	79·9	78·9	76·5	75·9	74·6	75·5	12 4	82·8	5 54	70·7
17	73·8	72·3	72·0	71·9	73·6	78·3	78·9	80·4	79·1	76·8	75·8	73·7	75·6	14 10	80·9	4 56	71·3
18	74·0	72·7	72·1	72·1	73·3	77·1	83·2	84·5	83·5	78·5	76·4	74·6	76·8	14 32	85·4	3 30	71·5
19	74·6	73·3	71·2	70·6	72·1	75·9	81·3	81·8	82·4	77·9	76·1	75·1	75·9	12 20	82·6	6 27	70·5
20	73·1	72·1	72·4	70·2	70·0	74·6	78·2	79·1	78·5	75·2	74·3	72·9	74·2	14 33	79·9	7 0	69·4
21	73·1	71·3	70·7	69·9	70·9	74·8	76·4	77·7	76·8	73·1	72·8	71·2	73·1	14 34	78·5	7 4	69·2
22	69·7	69·2	68·8	67·4	68·3	72·9	77·1	77·7	77·5	75·1	73·9	71·6	**72·3**	13 10	78·2	6 44	67·2
23	69·9	68·7	66·9	67·3	69·6	74·9	78·5	79·6	78·5	75·7	75·2	73·5	73·3	11 8	80·0	5 34	**66·2**
24	71·3	71·0	70·8	71·0	72·6	78·0	80·4	80·7	79·6	76·1	75·8	73·9	75·1	10 42	81·9	3 28	68·6
25	72·7	71·5	70·1	72·0	73·6	79·2	87·2	81·4	79·4	77·0	76·8	75·2	76·2	12 20	**88·2**	3 54	69·9
26	72·6	72·7	72·5	71·5	73·4	77·5	85·9	83·2	79·6	76·8	76·9	75·4	76·5	12 18	86·6	6 42	70·7
27	73·5	71·7	72·0	71·7	73·5	79·0	85·0	83·7	81·1	78·7	77·9	75·7	77·0	11 36	86·2	5 34	71·0
28	74·9	73·2	72·7	71·9	73·3	78·2	82·6	84·6	82·6	79·2	78·2	76·3	77·3	12 40	85·1	5 22	71·4
29	75·7	74·2	73·2	72·0	72·8	78·5	84·4	87·4	84·5	80·9	78·6	76·9	78·2	14 0	87·4	5 52	71·5
30	77·1	75·2	74·3	74·3	74·5	77·8	81·1	87·0	85·7	80·5	78·0	76·2	**78·4**	14 12	87·1	6 50	73·8
31	75·0	74·6	73·2	70·8	73·6	77·9	83·0	83·7	83·6	79·6	76·7	77·1	77·4	12 54	85·7	6 0	70·8
Mean .	72·5	71·6	70·9	70·2	71·4	75·9	80·5	81·7	80·2	76·6	75·4	73·7	75·0				

FEBRUARY.

1	75·6	73·3	72·5	70·7	73·1	76·5	80·4	81·5	79·9	76·5	75·6	73·9	75·8	13 24	82·0	5 56	70·7
2	73·6	72·2	73·2	70·7	71·0	77·1	81·1	81·5	80·4	77·7	76·5	74·8	75·8	13 20	82·6	6 58	69·2
3	72·6	71·9	70·9	70·6	72·2	76·8	83·5	81·8	81·0	77·5	76·2	73·7	75·7	12 0	83·6	7 4	70·0
4	73·5	73·2	71·5	71·2	72·6	76·6	80·5	80·4	80·9	77·4	75·9	75·0	75·8	12 55	82·7	6 48	70·0
5	74·9	75·3	74·5	73·2	73·0	77·1	79·3	82·0	79·4	76·7	76·0	75·0	76·4	13 50	82·2	7 10	70·7
6	74·8	73·2	72·3	72·1	73·1	77·8	79·2	80·3	80·4	76·5	76·2	75·0	75·9	15 0	80·8	5 14	72·0
7	74·4	73·9	73·8	71·5	72·6	76·7	78·6	79·2	77·3	74·6	74·1	73·6	74·9	11 54	79·7	7 0	71·5
8	73·0	72·7	71·8	71·6	71·4	73·8	75·6	76·2	74·4	72·1	71·7	71·5	72·9	13 24	77·1	6 54	70·6
9	69·9	69·1	69·5	68·7	70·8	73·5	75·6	77·3	74·7	71·0	70·0	69·6	71·5	14 1	78·1	6 26	70·4
10	69·5	69·6	68·7	68·0	69·9	72·4	74·1	75·7	74·9	71·7	70·8	70·1	71·2	14 45	76·4	6 45	68·1
11	67·9	66·5	64·6	64·3	66·7	71·6	74·9	75·9	76·4	72·4	71·7	71·1	**70·3**	14 31	77·2	6 29	67·8
12	68·7	69·3	68·6	68·1	68·9	71·9	76·4	76·4	75·9	73·2	72·0	70·2	71·5	15 4	76·6	4 54	63·6
13	68·8	68·0	67·6	67·3	69·2	73·7	76·5	76·8	76·4	73·3	72·4	72·2	71·8	14 12	77·7	5 54	67·9
14	70·0	69·3	70·1	69·5	70·1	73·6	78·1	79·1	77·9	75·7	74·2	72·3	73·3	14 15	79·3	1 18	68·2
15	71·9	72·3	71·5	70·4	71·2	75·8	80·7	80·5	77·0	72·9	72·1	71·8	73·9	12 35	82·0	5 54	70·4
16	70·8	70·2	70·0	70·2	71·0	74·6	77·4	78·0	76·0	73·3	71·4	70·0	72·6	13 54	78·4	23 50	68·2
17	68·0	68·1	67·6	67·0	68·3	73·5	77·1	78·0	76·8	74·0	73·5	72·7	72·1	14 4	78·4	6 30	66·8
18	71·3	70·2	68·8	68·5	70·5	74·8	78·2	79·0	79·7	75·9	74·4	72·4	73·6	15 0	80·3	7 4	67·8
19	71·0	72·1	72·0	69·8	71·3	75·5	78·5	78·3	77·5	73·9	72·5	72·4	73·7	12 12	79·8	6 49	68·8
20	72·6	72·3	72·2	71·3	72·4	75·0	77·9	78·2	76·4	73·0	71·4	71·1	73·5	14 1	78·5	23 50	69·5
21	69·5	68·8	68·5	68·5	68·9	74·4	77·5	79·0	78·9	75·6	73·6	72·5	73·0	15 10	79·9	6 49	67·4
22	71·4	71·8	71·0	70·0	71·7	76·5	79·3	80·1	79·3	76·8	76·3	72·8	74·8	14 10	80·2	6 45	69·6
23	73·5	73·8	72·7	71·5	72·7	74·8	75·1	76·1	75·4	71·7	70·7	69·2	72·9	14 28	77·2	23 50	67·0
24	67·3	67·0	67·2	66·6	68·0	72·3	74·9	76·3	74·7	72·3	72·0	69·8	70·7	13 56	76·7	6 30	66·2
25	67·3	65·7	65·1	64·4	68·4	74·7	78·9	79·2	78·0	75·6	75·1	73·3	72·2	13 3	80·0	6 36	64·1
26	71·1	69·9	71·3	70·7	73·3	79·6	87·5	86·4	82·1	77·4	78·0	76·6	77·0	13 0	**89·4**	2 5	69·8
27	74·8	73·5	72·8	72·1	74·6	78·7	83·0	84·0	82·7	78·9	77·2	76·0	**77·3**	14 31	85·1	5 5	71·8
28	74·9	74·0	72·9	72·4	73·8	77·5	80·4	82·4	82·4	79·0	77·6	75·8	77·0	15 20	83·7	6 7	72·2
Mean .	71·5	71·0	70·5	69·7	71·1	75·2	78·6	79·3	78·1	74·9	73·9	72·7	73·8				

*Derived from 24 hourly values.

†The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction page 3).

MARCH. (IN DEGREES FAHRENHEIT).

Date.	Hours.†												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	75·0	75·0	73·5	72·5	74·7	77·0	80·9	81·9	82·0	78·7	76·6	75·2	76·9	13 36	82·9	6 27	72·0
2	74·2	74·5	74·0	73·3	75·0	77·5	79·4	81·6	81·3	77·7	76·1	75·0	76·6	15 26	82·3	6 26	73·1
3	73·3	73·1	72·6	72·4	73·9	77·3	79·4	80·7	81·4	79·0	78·2	76·3	76·5	15 7	82·2	6 26	71·2
4	75·0	75·2	74·1	71·8	73·9	77·7	81·0	83·3	82·8	78·6	76·8	75·2	77·1	15 30	84·0	6 28	**70.9**
5	76·0	75·9	74·4	73·2	76·1	80·5	83·0	83·6	83·3	79·8	77·8	76·4	78·3	14 4	84·3	6 20	72·0
6	76·0	75·2	75·2	74·4	75·7	79·1	81·4	82·3	82·2	78·4	76·7	75·5	77·5	14 49	83·0	6 39	73·6
7	74·4	74·3	73·7	72·5	75·0	78·3	80·3	80·4	80·1	76·3	74·8	74·5	**76·1**	13 43	81·4	6 45	71·4
8	73·7	73·1	73·2	72·4	74·2	78·2	80·2	81·2	80·2	78·7	78·0	76·9	76·8	13 0	81·7	6 8	72·0
9	76·3	74·2	74·1	72·9	76·5	80·1	84·4	85·8	85·3	81·2	79·3	78·3	79·1	14 52	86·9	5 54	72·2
10	77·2	77·2	76·2	74·2	76·9	80·1	83·4	84·6	83·3	80·1	78·8	77·3	79·2	13 40	85·5	6 15	73·9
11	76·4	75·7	75·1	74·4	77·2	81·2	84·4	84·9	84·7	82·3	82·2	81·4	80·0	15 18	86·0	6 25	74·0
12	80·0	78·8	78·2	77·2	80·6	85·0	92·0	93·5	90·2	84·9	83·8	83·3	84·0	13 34	**95·2**	5 42	77·0
13	83·3	82·2	80·8	78·8	81·5	87·6	89·4	92·7	89·8	85·9	83·1	81·3	**84·5**	13 44	92·7	6 55	78·4
14	80·2	79·7	79·3	77·6	80·2	83·6	88·1	87·8	87·1	84·7	81·0	81·2	82·7	11 22	89·4	6 36	77·3
15	80·6	79·3	78·4	77·1	79·6	83·2	86·1	86·3	85·4	82·4	79·8	80·5	81·6	14 16	87·1	6 52	76·8
16	80·0	78·6	78·3	77·7	78·7	82·1	84·6	86·8	86·1	81·8	80·5	80·1	81·3	13 53	87·5	5 25	76·8
17	79·3	78·2	77·1	75·9	78·3	82·5	85·9	85·9	83·8	81·6	80·8	80·9	80·8	12 14	86·2	6 34	75·3
18	79·6	78·5	77·9	77·1	79·6	83·3	84·3	86·2	84·0	80·9	79·6	78·2	80·6	14 0	86·4	6 46	75·3
19	78·7	78·3	77·5	76·7	79·0	81·8	84·4	85·7	83·0	80·2	78·8	78·1	80·1	13 56	85·9	6 28	76·2
20	76·8	77·1	76·0	76·5	77.9	81·0	82·7	83·3	83·0	79·8	78·1	77·6	79·1	13 12	83·6	3 32	75·5
21	77·4	77·4	75·7	75·3	78·1	80·5	83·2	84·8	83·8	80·4	78·8	77·1	79·3	14 38	85·3	6 32	74·6
22	76·6	75·6	75·6	75·7	77·5	80·8	84·2	85·9	85·6	80·9	78·9	78·4	79·6	14 4	86·0	2 34	74·9
23	77·2	76·5	75·8	76·4	78·5	81·1	84·7	85·9	85·2	81·7	80·2	80·1	80·3	13 44	86·2	3 34	75·0
24	78·8	78·3	78·7	77·8	80·1	83·7	85·0	85·3	84·6	81·8	80·6	80·1	81·2	13 34	86·3	6 36	77·2
25	79·1	78·3	77·4	77·0	80·1	83·0	86·3	87·2	86·2	83·8	82·4	82·4	81·9	14 15	88·4	5 55	76·6
26	81·6	80·0	79·0	79·1	81·4	85·6	88·1	89·2	87·9	84·4	82·7	82·1	83·4	13 31	91·0	5 15	76·8
27	81·6	81·0	80·6	80·2	81·9	84·4	87·9	87·2	86·7	84·0	82·3	81·6	83·2	12 40	88·2	5 16	79·4
28	81·0	80·7	80·4	79·6	81·3	84·0	86·2	87·5	86·6	84·4	82·8	82·3	83·0	13 52	87·8	6 35	79·2
29	81·0	81·2	80·9	79·4	81·9	84·5	87·1	86·8	86·6	84·8	83·2	82·6	83·4	13 42	88·4	6 0	79·2
30	81·4	80·8	79·0	78·3	81·5	84·4	87·6	87·8	86·3	83·3	81·6	81·2	82·7	13 30	88·3	5 34	78·2
31	80·8	79·6	79·8	79·9	82·7	84·8	86·6	88·1	86·4	83·2	81·5	80·3	82·7	13 55	88·2	3 22	78·9
Mean .	78·1	77·5	76·9	76·0	78·4	81·7	84·6	85·6	84·7	81·5	79·9	79·1	80·3				

APRIL.

1	80·7	80·0	79·8	79·5	82·5	84·4	86·2	87·4	86·2	83·5	81·9	81·3	82·7	14 40	87·5	2 39	79·1
2	80·1	80·1	80·1	79·7	81·1	84·2	86·4	88·5	88·0	83·7	82·1	81·3	82·8	15 1	89·7	5 28	78·8
3	81·0	80·0	79·6	78·9	80·4	79·0	84·9	85·7	84·6	83·2	81·7	80·5	81·8	13 6	86·8	9 40	78·1
4	81·7	80·4	79·4	77·6	81·6	85·1	89·4	90·9	87·5	83·8	81·7	81·0	83·3	13 3	**91·8**	6 11	77·2
5	79·3	78·8	77·7	77·0	80·1	82·2	85·8	86·9	85·9	83·0	80·8	80·1	81·5	13 44	87·2	5 59	76·6
6	78·6	78·6	77·6	78·8	79·9	83·0	87·0	87·6	86·4	83·3	81·6	80·8	81·9	14 36	88·0	3 58	77·2
7	80·1	79·9	78·3	78·2	80·2	83·0	85·3	86·1	85·8	83·7	82·7	81·5	82·1	14 56	87·7	4 4	78·2
8	80·0	79·9	78·5	77·9	81·5	84·9	87·6	87·2	85·7	83·6	82·3	81·2	82·5	12 30	88·3	5 59	77·9
9	80·3	79·8	79·0	78·1	81·8	84·4	87·2	87·6	86·3	83·2	81·8	80·4	82·4	13 54	88·2	5 52	77·9
10	80·0	79·6	79·6	78·3	81·3	85·8	87·5	88·6	86·9	83·0	81·5	81·1	82·7	14 20	88·8	5 55	78·0
11	80·0	79·3	78·8	77·9	80·7	83·4	85·7	86·5	85·7	82·6	80·7	79·9	81·8	14 0	86·6	6 19	77·6
12	79·6	79·0	77·7	77·5	81·0	84·8	87·7	87·5	87·1	85·1	84·3	81·6	82·7	14 44	88·3	5 42	76·8
13	80·5	80·3	79·0	78·3	81·9	84·9	87·1	88·6	87·6	83·6	82·5	81·9	82·9	13 6	88·7	4 42	78·1
14	80·9	80·5	80·3	78·7	82·2	85·8	88·4	89·2	88·9	85·6	83·8	81·8	**83·9**	14 38	91·3	6 5	77·9
15	82·2	82·0	80·3	79·3	82·9	86·9	89·0	89·2	87·1	84·3	82·2	81·3	83·8	12 15	91·8	6 14	78·8
16	80·9	80·6	78·2	77·5	81·8	86·0	87·8	87·1	86·8	84·0	81·8	80·3	82·7	11 22	88·4	5 17	77·3
17	80·1	80·1	79·7	79·6	81·8	84·8	88·0	85·9	84·8	81·3	79·8	79·4	82·1	12 13	88·5	23 24	78·4
18	78·9	78·2	77·7	77·2	79·7	82·3	84·2	85·2	83·6	80·5	79·0	78·3	**80·3**	13 42	85·4	5 44	76·7
19	77·9	78·0	78·1	77·4	79·4	83·4	85·1	84·6	83·4	80·4	79·7	79·1	80·5	12 7	85·7	5 52	76·9
20	78·9	78·8	78·1	77·0	79·7	83·7	86·4	85·8	85·0	82·1	80·6	80·3	81·4	13 25	87·3	5 46	**76·5**
21	79·5	79·3	79·2	77·9	81·3	84·6	87·3	87·7	86·4	82·7	81·0	80·1	82·3	13 34	88·0	6 8	77·6
22	78·8	79·2	79·1	77·9	81·4	84·9	86·9	87·1	85·7	82·2	81·0	80·4	82·0	13 54	87·9	5 27	77·2
23	79·8	79·7	78·6	77·8	81·3	84·0	86·8	87·8	85·7	83·3	81·7	81·0	82·3	14 22	88·0	6 4	77·6
24	80·6	79·7	79·4	79·2	82·5	84·8	87·1	88·1	86·6	83·4	81·5	80·3	82·7	14 1	88·4	5 39	79·0
25	80·1	79·4	78·4	78·2	80·7	84·2	85·9	87·2	86·0	83·3	81·4	80·5	82·1	14 1	87·7	4 37	77·9
26	79·6	79·3	78·5	78·8	81·4	84·3	86·1	87·3	86·6	83·6	81·8	81·0	82·3	13 17	87·7	4 4	78·0
27	80·2	79·4	78·9	79·0	81·3	84·0	86·2	86·3	85·2	82·3	80·5	79·8	81·9	13 26	86·8	5 26	78·4
28	79·0	78·8	78·4	77·8	80·7	82·8	85·5	85·9	85·0	82·2	80·7	79·7	81·4	13 21	86·2	5 50	77·5
29	79·1	78·6	78·3	77·8	80·1	83·1	85·6	86·3	86·1	83·0	81·0	80·0	81·6	13 46	86·8	5 50	77·2
30	79·7	79·2	78·4	77·8	81·2	84·1	86·0	87·4	86·9	83·2	81·4	80·7	82·2	14 16	88·3	5 54	77·2
Mean .	79·9	79·5	78·8	78·2	81·1	84·1	86·7	87·2	86·1	83·1	81·5	80·6	82·2				

* Derived from 24 hourly values.

† The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction, page 3).

BI-HOURLY VALUES OF AIR TEMPERATURE, 1923.

MAY. (IN DEGREES FAHRENHEIT).

Date.	Hours.†												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	80·3	79·6	79·4	79·3	82·3	84·2	86·4	87·7	86·4	82·7	81·1	80·7	82·4	14 8	88·3	6 0	79·1
2	80·3	79·6	79·4	79·3	81·3	85·1	86·3	86·3	85·7	82·0	80·4	80·3	**82·2**	13 13	87·7	5 45	79·1
3	79·3	79·4	79·0	79·1	82·0	84·0	86·5	87·2	85·9	83·3	81·8	81·2	82·4	14 28	87·5	5 30	**78·7**
4	80·5	79·9	79·5	79·2	81·8	84·0	86·5	88·1	86·8	83·5	81·5	80·7	82·6	14 1	88·4	5 54	79·1
5	80·2	79·8	79·3	78·9	81·7	84·1	86·1	86·8	85·9	82·6	81·1	80·4	82·2	13 42	88·1	5 44	78·7
6	79·8	80·1	79·6	79·3	82·2	84·8	86·6	87·4	86·5	83·1	81·4	80·9	82·6	14 18	87·7	5 30	79·2
7	80·2	79·7	79·3	79·1	81·8	85·0	86·4	87·4	85·6	82·5	81·2	80·7	82·4	13 49	87·6	5 51	79·0
8	79·8	79·3	79·3	79·3	82·1	84·6	85·8	87·4	86·7	83·2	81·9	81·0	82·5	13 54	87·5	5 29	78·9
9	80·8	79·7	79·4	79·3	81·0	84·2	86·9	87·4	87·1	83·7	82·0	81·5	82·7	15 18	87·8	4 32	79·0
10	80·9	80·2	80·4	79·5	82·5	84·6	87·5	88·9	87·5	84·1	82·8	82·3	83·5	14· 52	89·5	5 26	79·2
11	81·6	81·1	80·8	80·5	82·9	86·0	88·0	88·0	87·1	83·4	82·2	82·1	83·6	11 15	88·4	5 52	79·7
12	81·5	81·0	79·7	79·6	83·3	84·8	86·5	86·7	85·5	82·7	81·2	80·8	82·7	10 56	87·2	5 34	79·3
13	80·5	80·1	79·9	79·9	82·6	85·3	86·7	87·6	87·5	84·3	82·8	82·1	83·2	13 54	87·8	4 37	79·4
14	81·3	80·5	80·2	80·3	82·9	86·1	87·6	88·4	87·3	84·6	83·4	83·0	83·8	14 7	88·9	5 54	79·7
15	82·3	81·9	81·6	81·6	83·9	86·6	88·5	88·7	88·1	85·3	83·7	83·2	84·6	13 42	89·2	5 37	81·3
16	82·8	82·4	81·9	81·8	84·0	87·4	88·8	89·1	88·4	85·0	83·4	82·8	84·8	12 51	89·6	5 49	81·3
17	82·3	82·0	81·4	80·6	83·3	86·1	88·8	90·1	89·1	85·6	84·0	83·3	84·7	13 22	90·4	5 42	80·0
18	82·6	82·1	81·9	82·2	83·9	87·0	88·4	88·8	88·7	85·7	84·2	83·6	84·9	13 29	89·2	4 54	81·5
19	83·1	82·8	82·3	82·0	84·4	86·7	88·3	89·7	88·6	85·7	84·0	83·1	85·1	13 54	90.1	5 52	81·9
20	82·7	82·2	81·9	81·9	84·0	87·6	89·2	89·0	88·7	85·4	84·0	83·3	85·0	12 57	90·1	4 54	81·6
21	82·7	82·0	81·6	81·6	83·6	86·9	88·4	89·2	88·4	85·4	84·0	83·0	84·8	13 12	90·0	5 45	81·3
22	82·2	81·7	81·5	81·4	83·9	86·0	89·8	89·6	88·1	84·2	82·8	82·5	84·5	11 56	90·0	5 51	81·2
23	81·9	82·2	82·5	82·4	84·5	87·4	89·8	88·6	87·2	85·3	84·1	83·3	84·9	11 38	89·9	0 47	81·6
24	83·2	83·3	83·6	83·7	84·4	86·0	88·0	89·3	87·2	84·9	83·7	83·1	85·0	13 36	89·8	23 29	82·5
25	82·8	82·6	82·2	82·0	83·8	86·8	88·9	90·1	88·0	85·3	83·7	83·4	85·0	12 47	90·6	5 45	81·8
26	83·1	82·7	82·7	82·6	84·1	86·8	89·2	90·0	88·7	85·2	84·2	83·5	85·2	13 48	90·1	5 27	82·1
27	83·7	83·7	83·2	83·1	84·4	87·5	90·0	90·9	89·7	86·0	85·3	84·5	**86·0**	13 52	**91·2**	5 17	82·6
28	84 3	83·5	83·5	83·3	85·4	87·2	89·0	88·9	89·3	**85·4**	83·7	83·3	85·6	13 15	90 7	5 37	82 9
29	82·9	82·6	82·2	82·4	85·0	88·0	89·4	89·7	86·7	84·0	82·7	82·6	84·8	13 29	90·0	3 32	82·0
30	82·2	81·7	82·1	82·6	84·1	87·1	89·1	89·4	89·0	86·0	83·6	83·3	85·0	13 16	90·0	2 40	81·2
31	82·9	82·4	82·9	82·7	84·5	87·6	89·1	90·0	89·5	86·3	84·0	83·1	85·4	13 3	90·7	2 24	82·1
Mean .	81·8	81·3	81·1	81·0	83·3	86·0	88·0	88·6	87·6	84·4	82·9	82·3	84·0				

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1	82·9	82·5	82·0	81·5	84·3	87·0	89·3	89·1	88·4	86·0	84·5	83·8	85·2	12 54	90·0	5 52	81·2
2	83·6	83·2	82·7	82·6	84·1	85·8	88·0	89·3	88·3	86·3	84·6	83·9	85·2	14 56	90·4	5 45	82·4
3	83·8	83·6	83·5	83·3	84·6	87·4	89·5	89·6	89·2	86·2	84·5	84·1	85·8	14 56	91·0	5 56	83·3
4	83·4	82·9	82·2	81·7	84·2	86·8	89·0	90·2	88·9	86·1	84·7	83·9	85·3	14 12	90·5	5 37	81·4
5	83·4	82·9	82·4	82·5	84·4	87·1	89·0	89·3	88·9	86·4	84·8	84·1	85·4	13 33	90·1	4 30	81·9
6	83·6	83·2	83·2	83·3	84·9	88·6	90·0	90·7	89·7	86·6	85·5	84·5	86·1	14 44	90·9	5 27	82·9
7	84·3	83·9	83·9	83·7	85·7	88·7	90·6	91·5	89·8	86·8	85·3	84·7	86·5	14 4	**91·7**	5 44	83·3
8	84·6	84·2	84·0	83·7	85·5	88·2	90·3	90·6	89·7	86·8	85·3	84·8	86·5	12 43	91·6	6 0	83·3
9	84·2	83·6	83·3	83·6	85·5	88·1	90·2	89·8	90·3	87·8	85·9	85·2	86·5	13 46	91·3	5 28	83·0
10	84·5	84·1	83·7	84·1	86·1	88·3	90·6	91·0	90·3	87·3	85·7	85·1	**86·7**	13 32	91·0	4 26	83·6
11	84·4	83·9	83·7	83·9	86·2	88·3	89·4	90·4	89·3	87·3	86·3	85·0	86·5	12 48	90·5	5 22	83·4
12	84·6	83·3	82·2	81·3	81·9	83·6	83·7	80·6	77·8	78·8	80·3	81·6	81·5	10 57	84·7	14 40	77·5
13	80·5	80·1	83·1	80·1	77·0	76·7	78·5	80·0	80·4	81·0	81·0	81·3	79·9	4 55	83·4	9 36	**76·1**
14	79·3	78·6	78·7	80·1	83·2	84·9	87·1	88·0	87·4	85·4	84·5	84·1	83·5	12 54	88·3	0 54	78·4
15	83·7	83·3	83·0	83·0	85·1	87·4	89·2	89·2	88·4	86·1	84·7	84·3	85·6	13 12	89·6	5 54	82·8
16	83·9	83·4	83·3	83·0	85·3	87·5	89·5	89·7	88·8	86·0	84·3	84·0	85·8	13 18	90·1	5 41	82·7
17	83·7	83·3	83·3	82·8	84·6	87·5	89·1	89·6	89·4	86·7	85·1	84·4	85·8	13 33	90·3	5 28	82·5
18	84·1	83·8	82·4	83·2	84·8	87·2	88·4	89·1	88·7	86·8	85·0	84·4	85·6	14 43	90·1	3 46	82·0
19	83·7	83·6	81·4	80·8	81·6	84·8	86·3	86·6	86·7	84·6	83·8	83·3	83·7	13 34	87·4	5 42	80·6
20	83·6	83·0	83·2	83·4	83·1	87·0	88·1	88·6	87·2	85·9	84·8	84·4	85·3	13 22	88·7	1 44	81·3
21	84·0	83·6	84·0	83·7	84·5	86·6	87·1	87·1	86·9	85·0	83·9	84·0	84·8	11 42	88·2	6 32	83·1
22	83·8	83·7	83·4	83·6	84·7	87·0	86·0	87·7	86·8	85·7	84·6	84·1	84·8	10 45	88·1	10 59	81·5
23	83·8	83·5	83·5	83·7	84·9	86·9	88·3	88·8	88·1	85·9	84·9	84·4	85·5	13 3	89·4	4 32	83·3
24	83·9	83·8	83·6	83·7	83·5	86·8	88·2	88·2	87·5	85·8	84·8	84·4	85·3	14 6	88·8	7 51	83·0
25	83·9	83·3	82·9	83·0	84·1	87·1	88·4	88·8	88·3	86·0	84·7	84·1	85·3	14 15	89·5	4 43	82·6
26	83·3	82·8	82·7	83·0	84·4	87·1	87·6	87·8	87·9	85·9	84·8	84·3	85·1	14 34	88·3	5 33	82·5
27	83·7	83·3	83·0	82·6	84·3	86·9	88·3	89·0	87·5	85·9	84·9	84·6	85·3	12 31	89·4	5 28	82·6
28	83·4	83·2	82·7	82·8	84·7	84·9	87·5	87·7	86·7	84·9	83·5	81·7	84·4	14 4	87·9	22 4	81·4
29	82·9	81·3	80·0	78·2	80·2	83·2	84·5	82·9	81·1	80·7	79·8	80·2	80·9	12 45	85·1	6 20	77·8
30	80·5	80·1	79·0	78·3	79·2	76·9	79·1	80·5	79·1	78·3	79·1	81·0	**79·2**	23 54	82·2	9 56	76·5
Mean .	83·4	83·0	82·7	82·5	83·9	86·1	87·7	88·0	87·3	85·3	84·2	83·8	84·8				

* Derived from 24 hourly values.

†The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction, page 3).

JULY. (IN DEGREES FAHRENHEIT).

Date.	Hours.†												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	82·3	82·3	81·4	80·1	80·6	80·5	80·9	81·7	81·9	81·2	79·4	81·0	81·0	15 11	82·5	8 15	77·2
2	81·2	79·1	77·5	76·1	75·5	75·7	76·5	76·4	76·5	76·5	76·6	75·0	76·7	0 14	81·3	21 16	74·4
3	75·1	75·8	75·8	76·4	75·8	76·2	76·4	77·4	81·8	81·6	81·4	81·4	78·1	15 57	81·9	7 29	73·9
4	81·4	81·3	81·4	81·7	82·3	83·1	83·3	84·1	82·2	82·8	82·0	82·0	82·3	14 3	85·1	1 46	81·0
5	82·0	81·7	81·4	81·8	82·6	84·4	85·6	86·2	85·2	83·7	82·9	81·2	**83·2**	13 21	86·6	21 14	80·1
6	80·0	78·2	78·5	80·5	82·0	82·7	84·3	83·4	79·0	79·4	79·1	78·7	80·3	12 52	84·8	21 13	77·2
7	77·9	77·8	77·7	77·8	79·1	79·8	82·1	82·1	81·2	82·4	82·1	82·2	80·2	12 50	83·3	3 34	77·0
8	82·1	79·7	81·0	79·2	79·6	82·4	81·5	76·1	75·2	76·4	76·9	76·6	78·8	10 51	83·3	15 56	75·0
9	75·0	76·0	75·7	75·7	76·7	77·1	77·4	79·4	79·0	79·0	77·2	77·9	77·1	13 44	79·9	0 16	74·9
10	77·6	78·3	77·6	78·0	76·0	78·1	80·6	82·0	80·9	79·0	78·7	78·2	78·6	13 21	82·7	6 36	**73·8**
11	78·1	77·6	78·7	77·5	78·8	80·3	81·9	82·6	79·6	80·8	78·6	78·9	79·6	12 32	83·3	1 5	77·1
12	79·4	79·3	78·1	78·7	77·1	79·8	82·5	79·7	80·0	80·8	80·8	80·4	79·6	12 6	82·7	3 34	76·5
13	80·4	80·5	80·1	80·5	81·1	81·8	81·6	80·7	81·3	80·1	78·7	80·4	80·5	9 55	81·9	20 53	78·1
14	79·8	80·6	80·4	80·7	81·1	82·4	83·4	82·4	82·4	82·3	81·5	81·3	81·5	11 22	83·9	2 44	76·4
15	80·4	80·8	80·1	80·6	81·1	80·0	79·4	79·3	80·5	79·6	79·6	79·6	79·7	9 56	81·4	10 35	76·4
16	78·6	79·0	78·5	78·6	79·9	80·3	79·6	80·6	81·0	78·5	78·7	79·0	79·3	15 47	82·2	5 32	76·5
17	78·8	78·9	79·0	78·1	78·4	80·8	81·6	82·2	82·9	81·1	79·4	79·3	79·7	13 56	83·1	1 3	77·2
18	80·3	80·0	80·1	80·4	81·4	82·5	79·1	81·1	83·4	81·3	81·5	81·3	81·1	11 23	83·5	11 56	78·9
19	81·4	81·4	81·2	81·2	82·7	84·0	86·2	85·9	84·6	82·0	81·9	81·9	82·8	12 32	**86·7**	3 29	81·0
20	81·5	79·7	80·4	80·8	81·7	82·8	83·3	83·3	82·4	81·9	81·9	80·5	81·7	12 4	83·6	23 29	79·5
21	79·2	80·4	80·7	81·0	80·3	79·6	79·6	80·0	80·7	80·2	80·2	78·8	80·1	16 20	81·3	8 34	78·2
22	79·9	78·5	78·0	78·7	79·5	79·9	78·8	77·3	77·9	78·2	77·4	77·7	78·5	9 57	80·7	21 6	76·4
23	77·2	76·2	77·7	77·2	76·8	78·9	79·3	80·3	80·4	79·7	78·5	78·8	78·4	16 54	80·5	1 42	75·3
24	77·9	78·2	78·6	78·1	76·7	76·7	78·6	79·9	80·3	80·6	80·3	80·4	79·0	15 55	81·0	9 17	76·1
25	80·2	80·1	80·1	80·1	80·8	81·2	82·0	82·8	82·6	81·3	80·9	80·9	81·1	15 1	83·6	8 52	79·9
26	80·6	80·4	80·1	80·1	80·7	82·4	81·4	83·0	81·2	80·0	79·6	80·7	80·9	11 18	83·5	17 45	79·2
27	80·5	80·3	80·4	80·4	81·1	81·7	81·8	79·1	79·8	80·4	80·4	80·4	80·4	11 17	83·6	12 54	77·8
28	79·9	79·8	79·6	80·0	80·8	82·0	81·8	81·8	81·6	81·1	80·8	80·8	80·8	10 37	82·3	6 42	79·1
29	80·4	80·1	79·8	80·1	80·5	82·0	83·5	83·0	81·5	80·5	79·3	80·3	81·0	13 15	84·5	2 34	79·3
30	80·4	79·9	80·1	79·0	80·1	81·6	83·7	83·4	82·3	81·3	79·1	80·0	80·8	12 7	84·2	18 26	78·4
31	80·3	79·8	77·8	78·6	80·3	80·2	80·8	80·9	81·0	80·4	80·1	80·1	80·0	11 37	82·6	4 24	76·4
Mean .	79·7	79·4	79·3	79·3	79·7	80·7	81·2	81·2	81·0	80·5	79·9	79·9	80·1				

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1	80·0	80·0	80·0	79·8	80·5	81·5	80·5	82·2	81·6	80·4	79·9	79·8	80·6	13 36	83·2	21 26	79·2
2	79·4	78·8	79·2	80·1	79·8	82·8	83·2	81·9	81·9	80·8	80·5	79·9	80·7	11 22	83·9	6 27	78·0
3	80·1	80·1	79·9	79·4	80·5	81·8	83·5	83·6	82·9	81·2	80·2	79·5	81·0	12 57	84·1	4 49	78·7
4	80·0	79·9	79·9	80·2	80·2	81·9	82·1	81·5	81·7	80·2	80·4	80·2	80·6	11 25	83·2	2 26	78·8
5	80·1	80·2	79·7	79·8	80·0	80·5	79·3	80·9	81·1	80·2	80·3	80·3	80·1	15 5	81·3	10 48	77·5
6	80·2	79·5	79·8	80·1	79·4	81·2	83·0	82·1	80·6	80·7	79·8	79·8	80·0	12 14	83·7	0 42	78·4
7	79·7	76·5	79·1	79·6	80·5	82·0	83·4	82·5	82·1	79·6	76·9	78·4	80·0	12 44	83·8	1 49	76·3
8	76·4	76·2	78·2	76·7	76·6	76·8	80·0	81·2	79·7	79·1	79·5	79·3	**78·3**	13 55	81·8	8 54	75·7
9	77·6	75·7	77·5	78·2	76·5	78·7	81·1	82·1	81·5	79·5	78·8	78·8	78·7	14 13	82·6	1 40	**75·3**
10	78·4	77·3	78·4	78·1	78·6	81·0	81·4	79·1	76·6	77·5	77·5	79·0	78·5	13 7	82·1	2 26	76·1
11	79·1	78·7	78·7	78·8	79·1	80·2	81·8	81·7	81·3	79·2	79·5	78·7	79·6	11 42	82·2	22 57	77·2
12	77·7	78·7	79·1	77·7	79·0	77·6	79·8	80·8	78·9	78·7	79·0	78·6	78·7	14 46	81·1	10 14	76·6
13	77·6	78·4	77·7	78·6	77·5	79·0	77·5	80·8	80·4	77·5	78·2	78·1	78·5	14 37	81·7	8 50	76·8
14	77·2	78·1	78·9	78·8	79·6	79·6	78·7	81·7	81·3	79·7	78·1	79·0	79·4	13 52	81·9	0 36	76·9
15	79·4	78·2	79·1	78·2	79·2	81·8	77·9	77·2	79·3	77·3	78·0	79·0	78·8	10 6	82·0	17 16	76·6
16	79·0	79·2	79·1	79·0	79·6	81·0	82·1	81·0	81·6	80·4	79·7	79·6	80·0	12 3	82·4	0 26	77·9
17	79·4	79·4	79·5	79·1	80·4	81·7	82·3	82·8	82·2	80·8	80·1	79·6	80·5	11 31	83·3	8 55	78·2
18	79·4	79·4	79·3	79·2	80·2	81·3	81·0	81·6	81·3	78·7	79·3	79·8	80·0	12 26	82·9	18 6	77·4
19	78·9	79·4	79·4	79·3	80·2	80·6	82·0	81·5	81·9	80·6	79·9	79·6	80·3	12 48	82·7	22 53	78·4
20	79·4	79·2	78·8	79·2	79·7	81·3	82·2	83·1	81·5	80·5	79·8	79·7	80·3	13 55	83·5	3 56	78·4
21	78·9	79·2	78·9	78·8	79·7	81·1	81·4	82·3	81·2	79·3	79·6	78·2	79·8	13 43	82·4	22 31	75·3
22	77·2	78·7	79·0	79·1	79·6	80·1	81·5	80·3	79·6	78·9	78·8	79·0	79·3	11 56	81·6	0 4	76·5
23	78·9	78·8	78·6	78·4	79·6	81·1	81·5	83·0	81·6	80·3	79·7	79·5	80·1	14 20	83·1	5 22	77·8
24	79·4	79·2	79·1	77·0	79·6	82·0	83·2	84·2	83·3	81·1	80·4	79·6	80·7	14 0	84·3	5 56	76·3
25	79·6	79·4	79·3	76·9	79·2	81·0	81·1	80·5	80·4	80·0	79·7	79·8	79·8	12 37	82·5	5 53	76·6
26	79·2	78·7	79·0	79·1	80·0	81·4	81·7	81·2	80·5	80·2	79·6	79·4	79·9	14 32	82·3	0 36	77·5
27	79·3	79·2	79·1	77·0	77·7	80·2	82·2	80·6	79·8	80·2	79·6	78·8	79·6	12 34	82·4	6 5	76·7
28	78·4	78·6	78·9	78·4	80·2	80·6	82·2	83·1	83·3	81·1	79·9	79·4	80·3	13 52	83·8	5 17	77·5
29	79·1	79·0	78·8	78·1	79·4	82·0	83·6	83·2	78·6	80·1	79·9	79·8	80·1	13 4	84·2	7 5	77·5
30	79·6	78·6	78·7	78·8	79·4	82·2	83·9	84·6	84·3	82·0	80·7	80·2	81·1	14 54	**85·1**	5 31	78·5
31	79·7	79·6	79·1	79·1	80·2	82·6	83·1	84·4	84·5	81·9	80·4	79·7	**81·2**	14 38	85·0	4 52	78·3
Mean .	79·0	78·8	79·0	78·7	79·4	80·9	81·6	81·8	81·2	79·9	79·5	79 4	79·9				

* Derived from 24 hourly values.

†The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction, page 3).

SEPTEMBER. (IN DEGREES FAHRENHEIT).

Date.	Hours.†												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	79·7	79·6	79·2	77·3	79·8	81·8	84·3	84·9	83·6	81·4	80·2	79·6	81·0	12 14	85·4	5 34	77·2
2	79·2	78·8	78·3	78·3	80·1	79·6	82·3	83·1	83·2	81·1	79·9	79·4	80·2	13 14	84·5	2 44	77·4
3	79·3	79·0	78·7	78·2	79·7	81·9	83·6	84·5	84·5	81·9	80·5	79·7	81·0	14 44	85·3	5 54	78·1
4	79·4	79·0	78·5	78·3	80·0	82·1	83·0	84·6	84·2	81·7	81·0	80·4	81·0	16 4	85·3	4 54	78·1
5	79·9	79·1	79·1	79·0	80·5	83·0	83·7	84·8	83·4	81·7	80·8	80·2	81·3	13 19	85·4	6 4	78·9
6	79·6	79·5	79·3	79·7	79·3	82·3	84·8	84·9	84·4	82·0	81·0	80·3	**81·4**	12 14	85·6	7 14	79·2
7	79·6	79·0	78·6	77·8	79·2	80·1	82·8	84·4	84·8	82·7	81·4	80·1	80·9	14 44	85·2	6 4	77·6
8	78·7	78·8	78·7	78·2	79·1	81·9	83·7	85·0	84·9	81·6	80·6	80·2	81·0	14 29	**85·7**	6 14	78·0
9	79·5	79·1	79·2	79·1	80·3	81·2	81·3	81·0	77·9	77·3	77·3	77·3	79·1	12 34	81·7	17 20	76·2
10	76·6	76·9	77·2	74·2	75·5	75·1	76·9	75·9	76·4	76·5	76·2	75·2	**76·0**	2 54	77·7	6 14	74·0
11	75·1	75·8	75·5	75·9	77·2	78·6	77·2	76·4	77·0	77·0	75·8	75·6	76·4	9 19	79·0	22 54	74·9
12	75·9	74·5	74·2	74·6	76·0	77·0	78·2	76·5	76·9	77·5	77·2	77·3	76·3	11 44	78·5	2 44	**73·3**
13	77·8	77·6	77·2	76·9	79·2	79·7	78·5	82·7	83·5	81·5	79·6	79·2	79·5	16 4	84·2	6 29	76·5
14	78·7	78·4	78·9	77·9	80·0	82·0	83·4	84·0	83·7	81·1	81·0	79·4	80·8	15 14	85·2	5 54	77·5
15	78·5	78·5	77·9	77·5	78·5	80·1	82·4	81·9	82·6	81·2	81·0	79·7	80·0	14 58	84·3	5 29	77·3
16	78·8	76·9	77·5	77·9	79·6	81·5	83·7	81·6	80·6	80·1	78·8	78·9	79·5	12 14	84.0	1 54	76·8
17	77·5	77·8	77·8	75·9	77·1	78·4	79·9	81·4	80·1	78·8	78·1	78·3	78·4	14 48	82·0	5 57	75·8
18	78·3	77·4	77·7	77·8	78·2	79·1	81·3	83·0	83·4	81·7	80·3	78·4	79·7	15 34	84·6	2 14	77·1
19	78·5	78·4	78·3	78·3	79·3	81·4	83·7	83·4	84·1	81·0	77·7	78·0	80·1	14 34	85·1	19 49	77·6
20	77·9	77·5	78·8	78·2	79·0	78·7	78·2	76·9	77·5	77·9	79·3	76·7	78·0	8 47	80·7	15 4	76·5
21	76·7	77·5	76·2	78·2	76·8	77·7	80·4	80·2	79·8	79·7	79·3	79·4	78·5	12 14	80·6	4 20	76·0
22	76·5	78·8	79·0	79·1	79·7	81·3	82·9	83·2	82·9	80·7	79·9	79·4	80·4	12 14	83·8	0 1	76·4
23	79·2	78·8	78·5	78·2	79·4	82·3	83·8	84·1	83·7	80·6	78·8	78·7	80·5	13 58	84·5	6 14	78·1
24	78·2	77·9	77·6	77·6	79·0	81·7	83·0	83·8	83·2	80·5	79·4	78·2	80·0	14 8	84·6	23 39	77·1
25	76·6	76·6	76·2	77·0	78·2	80·2	82·2	83·3	82·9	80·4	79·7	79·4	79·5	13 44	84·0	4 4	76·1
26	79·0	78·9	78·7	77·9	79·1	82·1	84·4	84·0	83·2	81·1	80·1	79·5	80·7	13 19	84·7	6 20	77·7
27	79·3	79·1	78·7	78·2	80·3	82·6	83·4	82·4	80·7	81·0	80·8	80·5	80·7	11 43	84·5	5 44	78·0
28	79·9	80·1	78·1	77·9	80·0	81·7	84·0	83·3	81·8	80·5	79·8	79·3	80·6	11 54	84·2	4 14	77·8
29	78·4	78·3	76·8	77·2	79·0	81·0	83·0	83·4	82·7	80·2	79·3	78·8	79·8	13 34	84·1	4 14	76·7
30	78·3	77·9	77·1	76·5	78·9	80·4	83·0	83·8	83·3	80·5	79·0	77·8	79·7	14 44	84·3	6 16	76·3
Mean .	78·4	78·2	77·9	77·6	78·9	80·5	82·1	82·4	82·0	80·4	79·5	78·8	79·7				

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1	76·2	76·7	75·6	76·3	78·0	80·9	82·3	83·7	82·6	80·1	79·1	78·4	**79·2**	14 5	83·9	4 36	**75·4**
2	77·3	76·9	75·8	75·7	78·4	81·2	83·3	83·4	82·6	80·2	79·2	78·8	79·4	13 23	84·0	6 8	75·6
3	78·2	78·3	78·2	77·8	79·3	81·8	83·0	84·4	84·3	81·1	80·1	79·3	80·5	14 6	84·8	4 52	77·3
4	78·8	78·5	77·6	77·2	79·2	81·9	83·3	84·8	84·4	80·8	80·0	79·3	80·5	14 44	85·1	5 54	76·9
5	78·9	78·5	78·0	77·9	79·1	81·5	83·2	85·4	83·6	81·2	80·3	79·6	80·6	13 56	85·6	3 17	77·3
6	78·9	77·5	76·8	76·7	78·5	81·4	83·6	84·2	82·7	79·9	79·2	79·0	79·8	12 46	84·4	4 40	76·3
7	78·2	77·7	77·1	76·9	79·0	81·7	83·1	84·0	82·6	80·5	79·7	79·2	79·9	13 34	84·3	4 26	76·8
8	78·1	77·6	76·9	76·8	78·8	81·2	83·0	85·5	84·9	82·3	81·3	79·5	80·5	13 49	85·5	5 49	76·6
9	78·3	77·4	76·8	76·7	79·0	81·0	84·6	85·0	84·0	81·4	80·7	79·6	80·4	13 14	86·2	5 56	76·3
10	78·4	78·6	77·9	77·5	78·9	80·9	84·8	85·7	84·5	81·9	80·4	80·6	80·9	12 57	86·5	6 12	77·3
11	79·3	78·6	77·6	77·1	79·6	81·3	84·6	85·0	83·9	81·1	80·7	80·3	80·7	13 35	85·5	5 24	77·0
12	79·1	79·4	79·2	79·1	80·4	83·2	84·9	85·6	84·6	81·0	80·1	79·4	81·3	12 55	86·0	6 16	78·8
13	79·2	78·5	77·7	77·2	79·9	83·3	83·4	85·2	84·0	81·3	80·4	79·3	80·7	14 12	85·5	6 15	77·1
14	78·6	78·1	78·2	78·5	79·9	83·4	85·9	85·6	84·3	81·1	80·5	80·3	81·2	11 33	86·4	4 36	77·9
15	79·1	78·4	76·8	76·8	80·1	83·0	89·0	87·9	85·3	82·7	81·5	79·0	81·5	12 13	89·7	6 35	76·6
16	78·9	78·4	78·2	77·7	79·9	85·2	88·9	86·5	84·2	81·7	81·0	81·0	81·7	12 34	89·7	5 27	77·6
17	79·4	79·9	79·5	79·3	81·3	85·8	90·3	88·9	87·3	84·5	83·3	82·7	83·5	12 57	**91·5**	5 44	79·2
18	82·1	81·7	81·0	80·2	81·9	84·3	88·2	88·9	87·9	84·6	83·5	83·0	83·8	13 56	89·2	6 15	79·9
19	82·1	81·5	81·0	80·7	82·3	86·1	88·2	88·7	87·9	84·7	83·6	82·3	**84·0**	14 33	89·4	6 5	80·5
20	81·9	81·2	80·7	80·1	82·5	85·6	89·4	89·5	88·7	84·8	83·3	82·0	84·0	12 37	90·7	6 11	79·8
21	81·2	80·2	79·4	78·9	80·6	83·3	87·8	88·6	87·3	83·8	81·9	80·6	82·7	14 16	89·5	6 14	78·8
22	80·3	78·2	78·4	77·3	79·3	82·3	86·9	88·7	88·1	83·7	81·5	80·8	82·0	13 51	89·0	5 42	77·2
23	79·5	78·1	77·4	77·4	79·2	82·8	87·2	88·8	86·7	83·4	82·0	80·9	81·9	13 27	89·2	4 54	76·2
24	80·2	79·7	79·5	78·8	81·1	83·8	88·1	87·4	85·3	82·2	81·7	80·6	82·2	11 58	88·8	5 28	78·0
25	79·3	79·6	78·4	77·8	80·4	84·4	87·5	88·8	86·4	82·6	82·1	80·7	82·3	14 15	89·5	5 56	77·5
26	79·6	79·0	78·0	78·1	80·4	84·1	87·2	88·8	86·8	82·9	81·5	80·6	82·2	13 40	89·0	3 33	77·8
27	78·9	79·1	77·9	77·5	79·5	82·5	87·6	88·7	87·2	83·0	81·2	80·3	81·8	14 12	89·2	4 16	77·3
28	78·8	78·2	77·7	75·8	77·6	82·3	86·0	86·5	84·7	81·6	79·8	78·4	80·5	14 6	87·4	6 1	75·7
29	78·5	78·9	77·0	76·1	78·1	81·0	83·5	85·4	83·7	80·8	79·8	78·8	80·1	14 4	85·5	5 52	76·0
30	77·5	77·4	77·2	76·2	78·4	80·7	83·9	85·4	84·7	80·8	79·8	78·1	80·0	14 10	85·5	5 52	76·1
31	78·3	77·6	77·4	76·4	77·9	81·1	83·0	84·3	83·1	80·6	79·9	79·6	79·8	13 57	84·5	5 26	76·3
Mean .	79·1	78·7	78·0	77·6	79·6	82·7	85·7	86·4	85·1	82·0	80·9	80·1	81·3				

* Derived from 24 hourly values.

† The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction, page 3).

NOVEMBER. (IN DEGREES FAHRENHEIT).

Date.	Hours.†												Mean*.	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
														H. M.		H. M.	
1	77·8	76·9	76·1	76·0	78·0	82·5	84·4	85·8	84·8	81·9	80·5	79·5	80·3	12 47	86·6	6 26	75·9
2	77·0	76·4	75·9	75·3	77·7	82·5	88·6	89·4	84·4	81·4	80·3	79·5	**80·6**	13 43	**90·6**	5 55	75·2
3	77·0	76·2	76·0	75·4	76·9	81·5	84·0	84·2	83·6	81·5	80·5	79·3	79·7	15 13	85·2	6 14	75·3
4	78·2	77·2	76·4	75·7	77·2	81·5	83·9	84·8	83·0	80·6	80·1	78·4	79·6	13 56	85·0	6 1	75·5
5	76·8	76·4	76·1	74·0	77·0	81·2	85·7	84·8	84·2	80·4	79·2	77·5	79·4	12 1	85·9	5 32	73·9
6	77·3	75·3	74·3	73·6	76·0	79·5	82·1	83·8	83·2	80·1	79·1	76·6	78·4	13 48	84·8	6 26	73·5
7	76·8	76·2	73·9	73·4	75·8	78·8	82·1	82·7	81·4	79·0	78·5	77·2	78·0	13 34	84·0	4 43	73·1
8	76·0	74·9	75·9	72·8	76·1	79·5	81·8	82·7	81·9	78·8	78·2	77·5	77·9	14 48	83·6	6 12	72·7
9	76·8	75·3	73·5	73·5	75·8	80·3	86·2	84·0	83·1	79·7	78·9	76·7	78·6	12 51	87·5	4 22	73·4
10	76·0	75·6	74·7	75·2	77·3	80·3	82·1	84·0	82·8	79·0	78·6	76·9	78·5	12 57	84·5	6 14	74·6
11	75·3	75·2	74·3	73·1	75·0	80·0	85·3	84·2	82·8	79·0	78·4	76·2	78·1	11 37	86·0	6 17	73·0
12	74·6	74·5	73·6	73·0	75·0	80·5	87·1	84·5	82·3	78·8	78·5	77·1	78·2	12 41	88·0	6 14	72·6
13	74·8	74·8	73·9	72·8	74·3	79·8	83·4	84·7	82·2	78·1	78·1	75·6	77·7	13 24	86·6	6 38	72·6
14	72·4	73·7	71·5	71·0	73·0	78·1	82·3	81·9	81·0	77·9	77·4	74·6	76·1	12 31	84·3	6 46	70·4
15	73·4	72·4	72·0	70·8	73·0	78·0	81·5	82·3	80·7	76·7	75·6	74·5	75·9	14 34	82·6	5 56	70·6
16	73·4	72·6	71·8	70·8	72·9	77·0	78·7	80·2	79·4	76·6	77·8	75·2	75·5	13 38	80·6	6 6	70·6
17	72·4	71·4	69·2	69·3	72·1	76·2	79·3	80·4	79·9	76·8	75·7	73·2	74·6	15 5	80·8	5 22	**68·5**
18	71·2	70·3	69·6	70·2	72·0	75·2	78·7	80·9	80·6	76·5	75·0	73·3	**74·3**	15 6	81·5	4 16	69·5
19	72·4	71·4	70·7	70·3	71·3	75·3	78·5	79·6	79·1	76·0	75·3	74·7	74·5	13 28	80·0	5 1	69·7
20	72·4	72·1	71·6	71·2	72·8	75·9	78·8	80·2	79·1	76·1	75·6	75·3	75·0	14 7	80·6	5 10	71·0
21	74·2	72·3	72·1	71·1	72·7	76·4	79·1	80·7	79·1	77·2	77·1	75·2	75·5	13 56	80·8	5 58	71·1
22	73·2	73·6	71·7	72·5	73·1	78·3	84·1	83·5	80·8	78·4	76·8	77·4	77·0	12 20	84·7	7 5	71·1
23	76·4	75·6	75·1	74·2	75·3	78·8	81·9	83·5	83·2	80·1	78·1	76·9	78·2	14 29	84·0	5 38	74·1
24	76·5	75·9	75·8	75·2	76·8	80·0	83·0	83·3	82·7	79·4	78·3	77·8	78·6	12 36	84·0	5 53	75·1
25	76·8	75·9	75·0	74·2	76·3	78·9	81·8	83·3	82·2	79·3	78·3	77·2	78·2	14 56	83·5	6 45	73·8
26	76·4	76·0	75·8	74·4	76·4	77·6	81·5	82·1	81·3	77·7	77·6	76·3	77·6	13 24	83·1	6 32	74·3
27	76·2	75·4	73·9	73·8	74·4	78·5	81·0	81·5	80·2	77·7	77·2	75·6	77·0	14 15	81·7	4 27	73·3
28	75·6	74·2	73·3	73·1	74·3	78·5	80·3	81·5	80·3	77·5	75·8	74·7	76·6	14 30	81·7	5 19	72·2
29	75·1	73·5	72·1	72·8	73·5	77·7	81·5	83·7	81·4	78·2	77·4	76·1	76·8	14 10	84·0	6 51	71·7
30	74·9	75·3	74·5	73·2	74·5	78·1	81·1	82·3	80·2	78·1	77·3	75·7	77·0	14 4	82·6	6 47	72·7
Mean .	75·2	74·5	73·7	73·1	74·9	78·9	82·3	83·0	81·7	78·6	77·8	76·4	77·5				

DECEMBER.

1	76·1	75·7	73·2	73·0	74·2	78·7	83·0	82·9	82·9	78·9	78·0	75·9	77·6	14 6	83·6	6 43	72·6
2	74·3	75·0	73·9	72·6	74·3	77·8	81·5	81·6	79·2	76·8	76·6	74·4	76·4	13 12	82·4	6 29	72·5
3	73·7	73·0	72·8	72·4	71·7	77·0	79·5	81·0	80·1	77·6	76·8	75·2	75·9	14 34	81·6	7 28	71·4
4	73·3	72·5	71·4	71·2	72·8	78·6	81·4	81·3	80·6	78·5	78·5	77·5	76·5	13 32	83·0	5 27	70·6
5	76·0	75·1	75·5	75·7	77·3	81·5	85·5	84·0	82·3	79·1	79·1	77·7	79·0	11 57	85·9	2 49	75·0
6	76·7	76·7	75·3	76·0	77·2	80·5	83·0	81·1	80·1	79·0	78·5	76·9	78·3	12 4	83·2	4 4	75·2
7	76·1	75·5	74·7	75·1	77·2	80·9	85·1	76·7	83·4	80·0	79·1	76·8	**79·1**	12 20	87·0	4 40	74·6
8	76·3	75·6	74·9	74·3	75·8	80·3	84·8	85·3	82·8	79·1	78·6	76·6	78·6	14 0	85·6	6 22	74·1
9	74·9	75·0	75·3	75·2	76·6	80·8	85·3	86·3	81·3	78·6	77·9	75·0	78·5	13 22	88·5	4 28	74·0
10	74·3	74·2	74·6	75·8	78·2	82·1	84·7	86·2	82·3	78·4	76·5	75·0	78·5	14 30	87·0	23 35	73·8
11	73·7	73·1	71·7	72·4	72·9	76·7	81·0	83·6	82·2	77·7	75·1	74·2	76·2	13 46	84·1	4 51	70·9
12	73·9	72·7	70·7	70·2	71·5	76·7	80·4	83·0	82·1	78·5	76·9	74·4	76·0	14 37	84·0	4 57	69·8
13	73·9	73·8	73·6	70·7	72·8	78·4	81·7	85·2	82·8	78·8	77·6	76·1	77·1	13 12	85·5	6 26	70·6
14	74·7	73·9	74·0	73·8	75·4	80·0	85·4	89·3	81·8	78·3	77·4	75·9	78·1	14 6	**89·5**	3 6	73·2
15	74·1	73·9	73·2	73·0	74·2	78·8	84·4	88·0	84·1	79·2	77·6	76·1	78·1	14 47	89·0	5 5	72·4
16	73·6	74·0	73·9	73·9	74·5	79·0	83·8	87·3	87·4	79·7	77·5	76·1	78·3	15 28	88·3	7 0	72·9
17	75·8	75·0	74·9	75·5	74·7	80·4	84·1	83·5	82·0	79·3	78·1	76·9	78·3	13 21	85·0	6 53	73·4
18	74·1	74·6	73·8	73·6	75·0	79·8	84·7	87·4	84·4	79·8	78·6	77·2	78·6	14 18	88·0	6 41	73·5
19	75·8	74·0	73·8	73·9	74·8	78·7	84·4	85·3	83·4	79·1	77·9	77·1	78·2	12 47	85·8	5 16	73·2
20	75·3	74·8	73·7	72·4	73·4	77·2	80·9	83·7	82·4	78·8	76·1	74·6	77·0	13 33	84·5	6 0	72·3
21	74·4	73·3	72·4	71·6	72·7	76·4	81·2	82·9	82·2	78·5	75·8	75·3	76·4	14 46	83·5	5 49	71·4
22	74·8	73·7	72·5	71·3	72·2	75·5	80·4	82·0	80·9	77·2	75·3	74·5	75·8	14 24	82·6	6 36	71·2
23	72·9	71·9	70·4	70·3	71·1	74·6	77·1	79·8	78·9	76·3	75·4	73·0	74·2	13 36	80·0	6 40	69·0
24	71·8	71·1	71·1	69·3	69·9	75·0	79·3	79·5	76·5	74·3	72·7	71·0	73·4	13 11	79·8	7 28	68·4
25	69·9	69·4	67·7	66·7	66·8	72·2	76·2	77·5	76·9	73·9	73·1	70·9	**71·7**	14 57	77·7	6 56	**65·3**
26	69·5	68·2	68·5	67·6	69·0	73·8	79·6	80·0	79·3	75·7	74·0	72·4	73·0	14 6	80·2	6 50	66·7
27	71·0	69·7	69·5	69·0	69·9	75 7	77·6	79·3	77·3	75·3	74·3	71·5	73·3	13 8	79·5	6 34	68·5
28	69·9	68·7	68·0	68·4	69·3	75·0	78·0	79·6	78·0	75·2	74·7	72·6	73·1	14 14	79·8	4 20	67·4
29	71·2	70·0	69·4	70·1	70·9	76·3	83·0	83·8	82·1	77·2	75·7	74·6	75·3	14 5	84·4	4 16	69·3
30	72·2	71·1	72·0	71·1	71·6	77·2	82·7	82·3	81·0	77·3	75·9	74·1	75·7	12 49	83·0	7 13	70·7
31	72·4	72·9	71·8	71·2	71·8	75·4	79·4	82·2	82·2	78·4	75·6	74·3	75·6	15 30	82·5	7 18	71·1
Mean .	73·8	73·2	72·5	72·2	73·2	77·8	81·9	83·2	81·4	77·9	76·6	75·0	76·5				

* Derived from 24 hourly values.

†The readings refer to 2 minutes after the full hour of local mean time (*vide* Introduction page 3).

BI-HOURLY VALUES OF RELATIVE HUMIDITY, 1923.

JANUARY.

(THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												*Mean.	Mean Vapour. Pressure.†
	0	2	4	6	8	10	12	14	16	18	20	22		
														"
1	78	86	81	85	86	56	33	40	58	67	70	62	67·1	0·557
2	73	63	71	67	63	55	46	38	60	69	65	64	60·3	·500
3	69	66	68	67	65	56	35	38	56	69	70	63	61·3	·497
4	76	81	74	70	71	63	48	49	51	56	71	80	65·6	·539
5	81	75	75	74	66	62	42	44	50	67	74	83	67·0	·550
6	78	81	74	70	74	63	54	37	50	67	76	80	66·4	·553
7	78	78	66	76	75	63	54	58	62	70	80	81	70·1	·581
8	74	78	79	79	78	61	52	54	57	71	80	82	70·7	·606
9	82	78	68	71	69	62	42	47	64	75	77	71	68·0	·599
10	79	75	76	74	65	62	47	55	59	74	78	70	68·3	·602
11	75	68	72	74	73	65	54	56	66	76	74	67	68·1	·586
12	60	67	57	57	45	46	46	52	56	63	68	60	57·0	·476
13	46	52	52	55	48	56	57	58	63	72	65	60	57·8	·470
14	74	80	78	77	76	66	66	69	75	80	83	75	74·5	·641
15	79	66	78	79	74	68	67	63	74	73	70	69	71·8	·635
16	77	72	68	78	78	70	69	62	72	73	75	70	73·2	·645
17	76	76	75	76	68	63	69	64	66	70	79	74	71·7	·634
18	80	76	80	75	74	67	48	64	69	81	81	81	73·9	**·680**
19	83	83	83	84	71	64	61	60	64	78	81	84	74·6	·666
20	89	84	80	85	76	73	69	53	61	60	70	78	73·6	·621
21	77	83	83	84	82	77	73	71	70	73	69	66	**75·7**	·615
22	61	71	72	68	63	54	38	48	54	61	63	52	58·1	·460
23	46	39	48	53	61	41	48	49	63	69	68	76	**55·1**	**·451**
24	69	73	71	71	60	46	55	63	65	68	68	72	65·1	·566
25	70	69	68	67	69	53	33	63	62	66	63	69	62·7	·565
26	63	75	69	67	74	61	40	63	69	71	64	66	65·3	·595
27	63	65	70	52	69	61	52	57	67	59	63	71	62·6	·580
28	78	82	83	75	74	65	56	47	61	66	55	47	64·7	·605
29	73	79	73	73	73	66	41	33	52	64	61	57	61·4	591
30	75	77	75	73	66	67	51	43	58	62	72	80	66·6	·646
31	73	72	64	63	70	62	47	57	55	69	78	83	66·7	·626
Mean .	72·7	73·2	72·0	71·6	69·5	61·1	51·4	53·7	61·6	69·0	71·3	70·7	66·6	·579
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·579	·566	·544	·528	·534	·546	·534	·580	·634	·631	·625	·587	·574	

Highest hourly value during January = 89.
Lowest hourly value during January = 30.

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1	77	83	82	70	73	60	53	62	72	76	76	72	71·9	·640
2	75	80	78	59	57	53	53	59	60	68	74	66	64·3	·572
3	68	53	66	57	62	55	38	57	61	71	73	76	62·0	·550
4	81	72	74	85	78	60	54	64	68	71	74	78	71·5	·636
5	81	76	78	81	77	60	69	62	72	71	71	78	72·7	·660
6	81	83	78	77	74	55	58	64	65	76	79	80	72·6	·648
7	83	81	78	80	72	54	63	68	72	77	75	81	73·4	·634
8	83	85	84	73	78	67	63	64	71	75	76	73	74·3	·600
9	79	77	76	77	77	66	57	58	62	67	68	72	70·0	·539
10	71	72	75	74	75	58	47	49	51	54	59	60	62·0	·473
11	65	67	66	66	69	44	47	40	43	50	50	53	55·5	·410
12	64	67	67	69	71	62	54	51	53	61	64	72	63·4	·488
13	74	77	76	76	75	64	62	64	64	70	73	73	70·9	·552
14	82	81	84	81	79	71	63	58	62	63	66	71	71·4	·584
15	72	77	79	81	79	73	63	67	78	80	78	80	75·9	634
16	85	85	86	81	76	65	58	55	54	59	59	66	69·0	·552
17	69	67	69	73	74	63	60	61	55	62	63	60	64·7	·509
18	62	63	65	70	73	53	53	56	56	66	70	74	63·2	·522
19	74	66	70	79	65	61	63	59	57	70	73	70	67·6	·561
20	68	67	68	69	80	64	54	56	51	62	63	63	63·2	·521
21	70	77	77	75	76	63	56	53	48	56	59	66	65·2	·528
22	67	71	73	75	71	63	57	57	61	59	61	78	65·5	·564
23	63	61	63	64	59	53	40	39	45	49	51	56	53·9	·435
24	56	58	58	63	69	49	48	45	45	48	48	50	52·6	**·394**
25	50	53	49	47	47	42	39	45	54	64	67	50	**49·9**	·394
26	51	47	51	56	54	32	25	51	63	67	53	66	50·5	·468
27	52	68	69	67	66	45	47	63	69	80	80	85	66 5	·622
28	86	88	88	90	82	80	74	67	68	77	81	86	**80·4**	**·744**
Mean .	71·0	71·5	72·4	72·0	71·0	58·4	54·2	56·9	60·0	66·0	67·3	69·8	65·9	·551
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·547	·541	·539	·522	·540	·509	·529	·568	·576	·570	·562	·560	·546	

Highest hourly value during February = 90.
Lowest hourly value during February = 25.

* Derived from 24 hourly values.
† Computed from mean temperatures and mean relative humidities.

MARCH. (THE FIGURES REPRESENT PERCENTAGES).

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Mean Vapour Pressure.†
														"
1	88	87	87	90	86	78	66	64	66	72	76	81	78·1	0·721
2	83	84	86	87	83	75	67	63	67	73	75	79	76·7	·701
3	83	83	86	87	83	72	59	62	59	59	57	45	69·3	**·631**
4	66	77	79	84	73	63	59	56	63	74	79	84	71·5	·664
5	79	77	82	78	76	76	72	67	67	74	79	83	75·9	·734
6	85	85	87	86	86	77	70	65	63	68	70	70	76·2	·717
7	68	73	74	81	75	65	62	59	62	71	74	78	71·0	·638
8	82	81	76	74	71	63	64	65	70	65	61	67	69·5	·639
9	68	76	66	72	68	56	50	53	54	67	66	71	63·7	·632
10	80	75	71	74	69	66	63	63	66	72	79	80	71·2	·709
11	80	82	87	87	81	67	65	66	66	63	63	63	72·2	·738
12	57	68	82	74	70	57	37	40	54	62	64	55	59·2	·689
13	53	63	68	58	62	47	58	47	57	61	66	59	**57·9**	·685
14	64	76	77	79	70	61	60	64	59	65	73	74	67·6	754
15	74	85	85	81	84	77	72	70	70	65	70	73	75·8	·816
16	82	85	84	84	80	76	68	61	54	65	67	71	72·9	·777
17	76	81	84	76	67	58	59	60	62	68	70	70	69·2	·726
18	74	69	71	67	62	55	55	61	66	73	80	84	67·9	·708
19	82	81	85	87	82	79	74	67	71	76	78	80	**78·6**	·806
20	84	85	85	83	76	67	67	62	52	62	70	78	72 6	·720
21	80	75	80	79	78	74	71	68	71	76	81	83	76·6	·765
22	85	86	86	81	76	68	68	63	62	76	81	85	76·5	·772
23	86	86	85	86	82	63	55	65	69	75	81	80	76·9	·794
24	81	80	72	82	68	65	66	61	68	76	79	79	73·3	·779
25	78	79	80	78	76	73	66	67	72	75	81	76	75·0	·815
26	80	88	86	84	77	59	63	63	66	76	81	81	75·3	·859
27	82	83	85	86	81	74	60	65	70	76	81	83	77·0	**·873**
28	80	80	80	84	77	73	68	68	62	68	71	71	73·7	·830
29	74	73	81	84	80	74	67	65	63	61	66	64	70·9	·809
30	68	74	80	82	77	71	68	60	60	66	79	74	71·7	·800
31	78	82	81	82	74	75	70	66	72	77	82	81	77·0	·859
Mean .	76·8	79·3	80·6	80·5	75·8	67·9	63·5	62·1	64·0	69·6	73·5	74·3	72·3	·747
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·737	·746	·744	·721	·735	·733	·753	·761	·762	·747	·749	·737	·743	

Highest hourly value during March =90.
Lowest hourly value during March =36.

APRIL.

1	76	78	82	82	79	74	68	61	64	65	71	74	72·5	·809
2	75	76	80	81	77	71	63	57	59	71	75	77	72·4	·810
3	77	81	82	83	77	78	61	61	57	55	65	68	69·5	·753
4	60	68	70	71	59	55	47	51	63	68	73	75	**63·5**	·722
5	80	79	82	84	80	72	61	61	63	70	76	76	73·5	·789
6	79	78	78	81	80	69	63	57	61	69	76	78	71·7	·777
7	75	75	79	80	73	69	65	59	58	63	62	70	69·3	·758
8	76	70	77	79	73	67	58	58	57	60	68	77	68·4	·758
9	79	78	82	85	78	70	66	61	68	75	76	80	75·0	·829
10	85	84	81	83	73	60	64	56	61	71	75	74	71·6	·799
11	80	82	82	82	71	70	66	64	60	65	74	77	72·9	·790
12	78	80	81	83	78	67	58	54	55	57	61	76	69·2	·772
13	77	76	80	83	74	69	67	66	68	77	78	81	74·9	·841
14	83	83	77	81	71	61	66	67	65	67	73	81	72·7	**·843**
15	71	72	78	60	58	52	50	61	69	67	77	77	65·7	·760
16	74	71	78	79	67	58	62	60	59	61	72	79	68·7	·767
17	86	85	83	85	81	71	65	68	65	77	81	81	**76·7**	·839
18	80	78	76	75	66	62	62	57	62	64	69	71	68·2	·704
19	71	71	72	75	70	62	61	64	66	64	68	75	68·5	·712
20	78	78	81	82	75	68	65	63	70	78	79	80	74·9	·801
21	82	80	81	82	77	63	62	58	63	69	74	76	71·9	·792
22	79	81	81	83	77	56	62	62	66	75	74	79	73·1	·797
23	83	77	83	84	74	68	60	57	63	67	75	82	72·9	·803
24	81	82	79	77	73	72	66	66	59	71	73	77	72·8	·812
25	75	78	80	82	74	68	64	58	58	62	71	77	71·0	·777
26	79	80	78	79	73	67	65	66	67	69	74	74	72·6	·800
27	76	81	80	81	74	69	65	65	66	72	76	77	73·5	·799
28	83	78	76	79	72	67	63	63	67	71	76	77	72·3	·773
29	78	80	82	83	79	71	65	64	66	72	76	80	74·7	·804
30	81	81	83	85	78	70	65	60	62	71	74	76	73·7	·809
Mean .	77·9	78·0	79·5	80·3	73·7	66·5	62·5	60·8	62·9	68·1	73·1	76·7	71·6	·787
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·794	·784	·781	·773	·780	·776	·793	·784	·783	·770	·784	·799	·782	

Highest hourly value during April =86.
Lowest hourly value during April =44.

* Derived from 24 hourly values.
† Computed from mean temperatures and mean relative humidities.

MAY. (THE FIGURES REPRESENT PERCENTAGES).

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Mean Vapour Pressure.†
														"
1	80	80	77	78	76	66	63	62	65	73	77	79	73·0	·807
2	78	78	77	79	76	69	66	67	69	77	79	78	74·1	·813
3	81	79	77	74	69	64	63	61	64	69	74	73	70·5	·779
4	72	75	73	72	69	65	59	59	60	62	63	63	65·9	·733
5	62	65	66	70	64	60	56	56	59	68	69	72	**64·2**	**·705**
6	70	71	73	76	71	67	62	62	63	68	69	70	68·2	·758
7	71	74	72	74	68	62	59	58	61	68	69	69	67·0	·740
8	71	70	72	70	60	59	57	55	58	65	70	71	65·2	·723
9	72	74	74	74	77	64	58	55	57	65	69	71	67·3	·751
10	70	75	73	76	71	66	60	56	60	69	76	77	69·0	·790
11	77	78	77	80	75	67	64	64	66	75	76	76	72·9	·837
12	80	82	83	83	72	74	67	66	68	76	78	79	75·7	·845
13	79	78	78	77	72	67	65	65	66	71	73	77	72·4	·821
14	80	76	79	77	73	66	64	62	64	70	75	75	71·6	·828
15	77	78	77	78	73	69	64	63	63	70	73	76	71·7	·851
16	79	78	79	77	74	67	64	64	64	70	73	75	71·7	·856
17	77	79	78	80	77	70	63	62	64	72	76	78	73·0	·869
18	79	79	79	78	73	68	65	64	66	72	75	77	72·8	·872
19	78	78	79	80	74	67	64	64	67	75	79	80	73·9	·891
20	80	79	79	80	77	66	65	63	66	73	75	76	72·8	·875
21	79	80	80	81	72	65	63	63	64	70	75	77	72·3	·863
22	75	76	75	77	73	66	60	61	66	72	78	78	71·1	·841
23	79	78	79	80	74	70	66	70	74	78	82	83	76·2	·913
24	81	78	75	79	80	80	73	69	72	77	81	82	77·0	·925
25	81	83	83	81	77	70	66	63	68	76	82	83	76·0	·913
26	79	81	80	81	76	71	66	63	66	74	77	81	74·5	·901
27	78	79	80	82	79	73	69	60	61	71	68	76	72·8	·903
28	71	74	75	75	70	71	66	63	62	76	80	81	72·1	·883
29	81	82	82	79	72	69	66	65	70	79	85	86	76·3	·911
30	86	85	83	84	81	72	65	64	67	72	79	80	76·3	·917
31	83	84	80	81	78	73	73	70	68	77	84	86	**78·1**	**·950**
Mean .	77·0	77·6	77·2	77·8	73·3	67·8	63·9	62·5	64·8	71·9	75·5	76·9	72·1	·841
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·835	·827	·818	·822	·834	·841	·845	·842	·846	·848	·848	·847	·836	

Highest hourly value during May = 87.
Lowest hourly value during May = 54.

JUNE.

1	83	84	86	87	79	74	68	66	69	74	78	81	77·3	·935
2	81	82	83	84	81	75	73	67	69	74	78	79	77·4	·936
3	79	81	81	81	79	73	69	70	70	75	79	80	76·4	·942
4	80	79	82	81	75	67	64	63	66	74	76	76	73·8	·895
5	78	78	80	80	75	68	62	62	64	70	72	71	71·5	**·870**
6	75	76	78	79	76	66	64	63	64	71	72	77	71·8	·894
7	77	77	77	77	74	66	65	61	63	70	76	77	71·6	·903
8	77	77	78	77	75	69	65	64	63	69	72	75	71·8	·905
9	72	77	76	77	74	67	63	64	64	67	73	74	**70·7**	·891
10	77	77	78	78	72	67	63	61	62	69	74	75	70·9	·899
11	77	76	77	76	74	72	68	67	66	71	76	76	73·0	·920
12	77	79	80	83	82	78	81	87	92	91	90	90	84·3	·905
13	85	87	85	85	92	91	89	83	85	85	83	85	86·8	·884
14	94	87	88	89	86	82	80	76	76	80	81	81	83·0	·950
15	82	81	83	82	79	76	71	71	69	76	76	78	76·9	·942
16	79	80	79	79	76	71	68	66	67	73	74	76	73·9	·901
17	76	79	78	76	76	69	65	64	64	68	70	74	71·6	·883
18	75	77	79	79	77	72	70	68	69	69	76	77	74·0	·906
19	79	81	88	90	88	81	80	77	76	81	81	84	82·5	**·951**
20	83	84	81	81	85	77	74	73	74	75	76	77	77·7	·943
21	80	81	79	81	80	75	75	77	76	79	79	81	78·9	·942
22	79	81	80	80	79	76	80	74	73	78	79	79	78·0	·931
23	79	80	77	79	79	76	73	71	73	76	79	79	76·7	·936
24	77	79	79	76	81	73	70	71	72	75	77	77	75·5	·916
25	79	78	79	81	79	72	68	69	68	73	76	77	74·9	·909
26	78	77	78	78	76	71	69	69	70	74	74	77	74·2	·894
27	75	78	78	80	75	70	67	68	68	71	75	75	73·3	·889
28	75	79	77	78	76	74	70	71	69	74	79	79	75·8	·893
29	80	77	85	84	85	81	74	83	89	87	88	90	83·9	·883
30	85	89	91	92	91	95	93	88	87	91	89	89	**89·7**	·893
Mean .	79·1	80·0	80·7	81·0	79·2	74·1	71·4	70·5	71·2	75·3	77·6	78·9	76·6	·911
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·903	·902	·901	·898	·919	·923	·935	·932	·921	·913	·909	·912	·913	

Highest hourly value during June = 95.
Lowest hourly value during June = 61.

*Derived from 24 hourly values.
†Computed from mean temperatures and mean relative humidities.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours. 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Mean Vapour Pressure.†
														"
1	83	85	88	90	86	91	91	89	87	87	86	87	87·3	·922
2	87	87	93	95	95	94	93	93	92	91	93	94	92·5	**·848**
3	95	94	94	95	93	96	94	94	89	88	86	89	92·2	·885
4	88	88	87	87	87	86	86	84	83	85	86	86	86·2	**·949**
5	86	85	86	84	85	83	80	79	79	81	82	88	**83·0**	·941
6	90	91	91	91	88	84	84	84	91	92	91	91	89·1	·920
7	90	89	91	91	90	91	85	83	87	85	87	85	87·9	·904
8	87	84	87	91	88	89	85	90	93	94	95	96	90·0	·884
9	95	95	97	94	92	93	94	90	91	90	91	90	92·6	·860
10	88	89	92	91	92	86	81	83	84	85	86	90	87·1	·850
11	93	92	88	91	84	87	83	82	81	83	84	84	85·8	·865
12	86	89	91	88	91	89	85	90	88	87	87	87	88·2	·890
13	89	88	88	89	87	87	89	84	87	91	89	90	88·5	·919
14	92	90	89	89	87	85	81	85	86	85	86	86	86·5	·928
15	90	87	82	87	87	84	93	93	90	90	84	90	88·7	·898
16	92	91	91	92	89	89	87	88	87	88	88	89	89·3	·892
17	88	91	87	90	84	88	88	83	84	87	88	85	87·3	·883
18	89	87	87	88	84	82	90	87	84	82	86	87	86·2	·913
19	87	86	86	87	85	82	80	80	80	89	87	88	84·7	·948
20	89	90	89	89	90	88	86	86	86	87	87	86	87·7	·947
21	91	90	89	88	90	92	92	92	90	85	90	91	90·0	·923
22	89	92	93	91	90	89	93	95	94	94	93	94	92·5	·900
23	95	97	96	94	98	93	91	89	89	91	94	91	**93·1**	·903
24	93	93	93	91	93	95	92	92	87	87	88	88	90·6	·896
25	88	87	87	88	89	89	85	84	84	85	85	86	86·3	·914
26	87	87	88	87	87	86	88	83	86	89	88	87	86·6	·911
27	87	86	85	87	85	86	79	86	88	85	86	86	86·3	·894
28	88	88	89	85	87	83	83	84	83	85	85	87	85·5	·897
29	87	86	88	86	84	83	80	81	85	85	84	85	84·4	·891
30	87	86	85	88	88	86	82	81	84	84	88	88	85·2	·894
31	87	89	92	91	88	90	88	87	87	88	88	87	88·5	·904
Mean .	89·1	89·0	89·3	89·5	88·5	87·9	86·7	86·5	86·6	87·3	87·7	88·3	88·1	·902
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·902	·892	·892	·894	·896	·919	·922	·919	·914	·907	·894	·900	·903	

Highest hourly value during July = 98.
Lowest hourly value during July = 78.

AUGUST.

1	87	86	85	88	87	85	87	85	85	87	89	87	86·4	·900
2	89	87	89	89	87	83	82	86	82	83	87	87	86·0	·899
3	87	87	89	88	86	85	81	81	81	83	85	88	85·4	**·902**
4	87	85	86	85	87	84	78	85	84	87	86	87	85·1	·887
5	85	85	87	87	88	86	88	87	85	86	86	85	86·0	·882
6	85	87	86	85	88	83	84	83	86	86	89	89	86·5	·896
7	82	91	88	89	87	86	80	81	81	85	95	92	86·4	·883
8	93	94	92	92	93	95	90	86	84	87	88	90	**90·9**	·879
9	89	93	92	86	92	90	89	85	87	82	90	97	88·5	·867
10	86	89	90	88	88	83	83	89	93	93	88	88	88·3	·859
11	85	88	88	88	89	86	84	83	83	89	88	89	86·8	·876
12	93	88	87	91	87	91	89	86	90	88	88	87	88·7	·869
13	88	88	91	85	90	91	90	87	86	90	90	89	88·7	·863
14	93	91	88	88	88	85	84	83	80	84	91	83	86·8	·870
15	86	91	87	90	89	83	91	92	89	93	91	88	88·6	·870
16	86	86	86	86	85	84	83	84	82	84	87	87	85·1	·870
17	87	85	87	86	86	83	83	80	79	80	82	84	83·7	·869
18	86	84	85	86	82	82	84	81	82	88	87	87	84·4	·862
19	89	86	85	84	85	83	81	81	79	83	84	84	83·4	·861
20	84	87	87	84	83	83	80	79	80	80	82	84	83·0	·857
21	87	84	84	86	84	83	81	80	81	86	84	84	83·8	·851
22	92	87	86	84	84	82	82	85	84	85	85	85	85·2	·851
23	84	84	84	87	87	84	82	80	81	81	84	83	83·3	·854
24	84	85	86	89	87	82	78	77	75	79	82	84	81·9	·856
25	84	86	83	88	85	82	82	85	83	82	81	84	83·6	·849
26	83	85	86	85	85	82	80	82	83	83	84	86	83·9	·855
27	87	88	88	84	88	82	81	87	79	84	83	88	84·7	·854
28	84	86	86	88	82	80	78	74	77	79	78	84	81·1	·837
29	82	82	84	81	82	78	71	75	81	78	80	80	79·5	**·815**
30	81	84	82	84	84	80	75	74	71	75	79	80	79·0	·837
31	81	82	84	82	81	77	76	70	73	77	80	80	**77·9**	·828
Mean .	86·3	86·8	86·7	86·5	86·3	84·0	82·5	82·4	82·1	84·1	85·6	85·8	84·9	·865
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·854	·853	·857	·847	·865	·884	·889	·893	·873	·857	·860	·860	·865	

Highest hourly value during August = 96.
Lowest hourly value during August = 70.

* Derived from 24 hourly values.
† Computed from mean temperatures and mean relative humidities.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES).

Date.	Hours.												Mean.*	Mean Vapour pressure.†
	0	2	4	6	8	10	12	14	16	18	20	22		
														"
1	80	81	80	85	82	79	73	74	74	78	79	82	78·5	·829
2	82	84	85	86	87	87	82	76	74	74	78	81	81·1	·834
3	81	83	83	84	80	77	71	70	69	73	76	79	77·0	·813
4	79	81	81	81	79	76	74	70	71	73	79	77	76·4	·807
5	78	81	81	81	78	74	74	70	73	76	76	78	76·7	·818
6	78	79	81	81	84	70	71	65	70	73	76	78	75·0	·802
7	76	80	80	83	85	82	73	67	64	69	73	76	76·1	·801
8	82	82	81	86	86	80	74	71	67	73	74	76	77·7	·820
9	78	78	77	80	78	81	78	75	84	87	84	85	80·5	·799
10	85	84	85	90	91	93	92	90	88	88	90	90	89·4	·801
11	89	90	90	89	88	88	88	89	86	92	93	91	89·5	·812
12	93	93	90	88	90	91	89	92	93	93	93	93	91·6	·829
13	92	93	93	91	92	89	89	81	79	77	87	84	87·0	·875
14	86	89	86	88	89	83	79	75	76	79	79	86	82·8	·869
15	90	91	91	90	89	87	81	79	78	84	86	91	86·5	·884
16	93	91	93	93	91	87	84	88	90	88	93	94	90·4	·909
17	94	91	95	93	95	93	89	88	89	90	93	95	92·2	·894
18	93	92	93	93	91	90	85	82	81	85	92	93	89·1	·902
19	92	92	92	93	91	89	84	83	81	87	92	93	89·0	**·912**
20	93	93	90	92	93	93	93	95	96	91	94	94	**93·2**	·892
21	94	92	95	92	92	93	87	92	90	90	91	92	91·6	·891
22	93	93	93	91	90	87	83	81	79	80	82	83	85·7	·887
23	82	81	82	82	80	78	74	72	71	78	81	81	78·4	·814
24	83	82	84	88	85	77	73	71	69	72	77	81	78 4	·801
25	84	84	85	89	87	81	71	69	67	73	75	78	78·8	·792
26	78	78	78	82	79	74	70	68	69	73	76	76	**74·9**	**·783**
27	79	78	79	84	78	75	76	78	80	78	76	80	78·0	·816
28	81	83	87	84	83	81	75	76	79	79	80	82	81·1	·845
29	85	85	90	91	89	78	75	71	72	76	80	81	81·3	·825
30	82	81	83	86	87	80	71	68	67	71	75	78	77·9	·788
Mean .	85·2	85·5	86·1	87·2	86·3	83·1	79·3	77·5	77·5	80·0	82·7	84·3	82·9	·838
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·826	·823	·821	·824	·851	·863	·868	·856	·846	·828	·831	·829	·839	

Highest hourly value during September = 96.
Lowest hourly value during September = 63.

OCTOBER.

1	82	82	82	89	86	76	71	67	66	71	74	77	76·8	·765
2	81	85	88	88	85	78	73	73	73	77	79	81	80·1	·803
3	83	85	87	88	89	83	77	74	70	77	77	81	80·4	·835
4	80	81	86	89	85	80	74	72	68	72	79	80	78·9	·820
5	82	84	86	88	85	77	72	66	69	73	76	77	78·2	·815
6	82	85	87	88	85	77	71	70	71	76	81	82	79·7	·809
7	86	87	84	85	81	81	72	72	76	80	88	90	81·7	·832
8	92	93	91	92	90	85	71	70	70	74	83	89	82·9	·861
9	91	92	93	92	90	85	74	72	74	74	74	83	82·5	·854
10	88	85	86	84	87	84	66	68	71	77	85	87	80·8	·850
11	91	92	92	92	87	81	69	72	77	82	86	87	84·1	·879
12	91	90	90	91	89	79	76	71	79	86	88	89	**84·8**	·904
13	93	93	93	92	87	66	74	72	73	81	87	89	83·3	·871
14	87	86	80	89	85	70	69	71	74	81	83	86	80·0	·850
15	90	90	88	85	83	70	39	60	66	68	65	62	72·2	·775
16	71	76	81	76	68	61	54	68	71	75	77	78	71·3	·770
17	76	82	80	82	74	70	60	70	74	79	83	75	75·4	·863
18	87	85	85	88	83	75	62	67	69	76	82	85	78·4	·906
19	85	85	87	83	83	77	70	71	67	76	75	82	78·4	**·912**
20	81	80	76	74	81	74	51	67	65	75	78	83	73·9	·860
21	87	86	82	80	79	66	54	53	57	71	79	78	72·8	·812
22	84	81	84	86	81	74	56	49	55	67	71	78	72·2	·787
23	78	71	73	81	74	61	57	57	62	69	79	72	69·4	·755
24	70	78	80	80	73	65	54	64	66	71	75	70	70·0	·768
25	74	76	81	75	70	53	54	56	64	72	72	68	**68·4**	·753
26	75	76	74	80	75	64	52	54	66	78	81	84	71·7	·787
27	80	82	81	79	76	58	39	45	59	74	74	74	68·5	·742
28	74	78	80	80	73	63	44	53	65	77	77	81	70·6	**·783**
29	84	86	86	83	83	75	72	73	71	80	86	86	80·3	·823
30	90	91	89	91	89	85	73	67	66	71	76	83	80·7	·825
31	85	85	85	87	83	77	70	63	67	75	81	84	78·8	·800
Mean .	83·2	84·1	84·4	85·1	81·9	73·2	63·5	65·4	68·4	75·3	79·1	80·7	77·0	·820
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·825	·823	·808	·804	·826	·817	·780	·822	·824	·822	·832	·827	·816	

Highest hourly value during October = 93.
Lowest hourly value during October = 39.

* Derived from 24 hourly values.
†Computed from mean temperatures and mean relative humidities.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES).

Date.	Hours.												Mean.*	Mean Vapour Pressure.†
	0	2	4	6	8	10	12	14	16	18	20	22		
														"
1	87	86	82	83	69	67	60	62	61	69	75	76	74·0	·764
2	78	73	79	75	68	54	38	42	68	77	80	71	67·1	·699
3	70	72	74	77	74	65	53	59	66	69	63	70	67·1	·679
4	61	71	73	75	73	60	51	60	67	70	75	64	66·6	·672
5	78	82	80	72	60	61	54	60	56	75	80	82	69·6	·697
6	84	79	83	85	81	73	57	58	67	76	83	67	73·7	·715
7	84	79	81	77	79	70	62	69	76	79	83	79	76·4	·731
8	88	89	86	76	77	71	56	65	71	80	82	82	77·0	·734
9	83	84	81	86	80	65	45	68	67	77	80	72	72·9	·712
10	80	80	78	70	64	58	57	58	67	69	67	79	67·6	·658
11	67	73	76	81	77	62	54	59	60	71	81	75	70·1	·673
12	76	76	76	79	76	64	39	55	69	72	82	72	69·8	·672
13	68	70	72	71	58	53	42	49	58	68	77	60	61·8	·586
14	54	61	70	72	67	50	31	44	55	66	76	62	**59·6**	**·536**
15	79	64	63	67	63	58	47	49	54	65	71	79	62·5	·558
16	81	81	79	79	74	67	71	73	65	68	66	81	74·1	·653
17	73	80	73	73	78	64	47	53	53	63	68	79	67·7	·579
18	71	75	82	83	76	68	57	58	60	67	74	79	71·4	·604
19	84	85	86	87	84	79	56	54	56	68	72	77	74·1	·631
20	83	86	85	88	84	77	63	61	60	64	72	76	74·7	·647
21	79	83	85	89	85	77	70	64	71	71	73	75	76·4	·673
22	79	79	78	83	74	72	45	62	71	78	74	78	73·7	·682
23	79	79	80	77	75	72	71	64	65	79	86	88	76·6	·738
24	86	87	84	84	82	72	64	66	70	84	87	87	79·3	·774
25	88	87	88	89	84	79	72	67	71	82	85	87	**81·5**	**·785**
26	88	89	88	90	88	84	72	73	73	80	75	76	81·3	·768
27	84	85	80	88	78	76	67	64	64	71	77	69	75·9	·703
28	78	77	77	80	79	62	58	61	71	74	77	75	72·4	·662
29	81	81	80	82	74	65	47	50	63	72	71	72	71·3	·656
30	70	71	67	61	76	66	59	59	70	74	83	78	70·0	·648
Mean .	78·0	78·8	78·8	79·3	75·2	67·0	55·5	59·5	64·8	72·6	76·5	75·6	71·9	·676
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·680	·671	·653	·645	·649	·661	·611	·671	·700	·709	·728	·686	·671	

Highest hourly value during November = 90.
Lowest hourly value during November = 31.

DECEMBER.

1	75	78	83	76	75	70	65	69	64	76	81	85	75·1	·709
2	84	88	88	90	85	73	67	65	68	68	63	61	74·6	·677
3	60	64	70	74	60	50	52	51	62	68	62	61	60·5	·540
4	54	60	55	57	60	60	61	65	66	73	75	69	64·1	·584
5	76	72	76	77	75	66	65	69	73	80	78	78	73·5	·727
6	77	85	84	84	80	74	67	77	76	75	77	79	**78·9**	**·763**
7	79	76	77	73	81	74	47	64	74	72	75	72	72·2	·716
8	74	83	86	81	81	68	54	62	67	74	74	70	73·1	·714
9	77	79	75	75	62	55	40	54	67	67	73	72	66·2	·644
10	76	77	64	50	45	47	48	35	62	72	70	70	60·4	·588
11	73	74	67	77	73	62	55	54	55	69	79	77	66·8	·602
12	82	78	81	74	71	67	52	37	54	70	81	73	68·5	·614
13	76	57	72	68	67	64	47	44	65	75	71	64	64·5	·599
14	83	79	76	68	68	61	44	34	66	73	76	79	67·5	·648
15	86	81	82	71	68	58	42	37	61	70	71	68	65·4	·628
16	69	75	73	71	65	57	47	36	50	71	65	60	61·8	·597
17	73	76	56	59	57	53	41	59	64	71	74	66	62·7	·606
18	68	77	75	74	68	56	47	41	59	72	79	73	67·2	·656
19	67	68	76	81	76	63	44	59	66	79	77	74	70·3	·677
20	64	79	78	83	72	65	54	51	61	63	68	78	68·1	·631
21	72	79	76	80	72	65	53	51	62	71	77	78	69·3	·629
22	83	81	77	79	75	64	56	55	68	77	84	84	73·8	·657
23	90	90	87	87	82	71	69	68	72	70	76	71	77·6	·655
24	70	74	57	54	46	45	39	49	50	50	46	44	**51·2**	**·420**
25	46	56	54	61	52	46	47	50	57	65	70	71	56·2	·436
26	65	79	80	78	77	65	56	61	67	76	81	76	72·2	·585
27	78	82	80	81	77	56	57	64	67	62	57	51	67·0	·548
28	58	58	50	57	56	48	51	55	64	73	73	74	60·2	·489
29	75	82	85	76	75	64	45	48	66	80	76	74	70·9	·620
30	79	79	75	75	73	59	44	60	66	76	78	70	69·6	·617
31	73	80	79	76	77	69	51	43	52	69	76	80	69·2	·612
Mean .	73·0	75·7	74·0	73·1	69·4	61·1	51·8	53·8	63·6	71·2	73·0	71·0	67·7	·619
	"	"	"	"	"	"	"	"	"	"	"	"	"	
Mean Vapour Pressure.†	·607	·618	·590	·577	·566	·581	·563	·610	·681	·679	·667	·615	·613	

Highest hourly value during December = 90.
Lowest hourly value during December = 34.

* Derived from 24 hourly values.
† Computed from mean temperatures and mean relative humidities.

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	0	0	2	3	3	4	10	10	10	4	3	2
	10	0	0	1	1	3	6	10	10	9	4	1	2
1	14	0	0	1	1	0	5	10	10	5	5	1	1
	16	0	0	0	1	0	5	10	10	7	2	1	1
	22	0	0	0	6	7	3	10	10	3	0	0	0
	6	0	0	4	8	6	8	10	8	6	7	0	1
	10	0	0	3	2	3	7	10	6	10	6	0	0
2	14	0	0	1	3	0	6	10	8	9	1	0	0
	16	0	0	0	3	1	7	10	10	8	2	0	0
	22	0	0	0	4	6	3	10	10	2	0	0	0
	6	0	0	0	6	4	10	10	8	4	4	0	3
	10	1	0	0	10	3	7	10	10	6	5	0	5
3	14	1	0	0	7	5	6	10	9	3	2	0	7
	16	1	1	0	5	5	7	10	6	0	1	0	6
	22	2	0	0	4	4	2	10	9	1	0	0	0
	6	1	0	0	1	3	3	10	8	6	3	0	8
	10	2	0	0	0	5	1	10	10	7	5	0	8
4	14	2	0	1	2	4	3	10	10	4	0	0	7
	16	1	0	1	2	2	2	10	10	6	1	0	1
	22	1	0	0	0	1	2	10	10	3	0	0	0
	6	0	0	1	2	4	4	10	10	5	7	0	8
	10	1	0	1	5	1	3	10	10	5	5	0	3
5	14	1	0	2	1	0	4	8	10	6	2	0	1
	16	1	0	2	1	1	3	9	10	9	1	0	1
	22	0	0	4	2	2	2	8	10	2	0	0	0
	6	0	0	6	5	2	7	10	10	9	7	0	5
	10	2	1	4	0	2	2	10	10	6	5	0	8
6	14	1	1	2	1	2	4	10	10	4	0	0	8
	16	1	1	1	1	3	3	10	10	6	1	0	8
	22	0	0	4	2	0	1	10	8	2	2	0	0
	6	0	8	0	5	2	4	10	10	5	8	1	9
	10	0	5	0	8	4	5	10	9	10	5	1	3
7	14	0	3	2	8	2	3	10	9	5	0	0	1
	16	0	3	1	7	5	4	10	10	3	0	1	0
	22	0	0	0	0	2	2	10	10	4	0	0	0
	6	0	3	2	0	3	3	10	10	6	4	2	0
	10	0	8	0	1	1	5	10	10	4	2	1	1
8	14	0	7	2	1	0	3	10	7	2	1	3	2
	16	0	9	2	1	3	6	10	10	4	1	4	2
	22	0	0	0	0	1	2	10	10	2	0	0	0
	6	0	8	1	0	4	3	10	8	9	7	2	2
	10	0	1	0	0	2	5	10	10	10	3	1	3
9	14	0	1	2	0	1	6	10	8	10	1	4	2
	16	0	0	2	2	0	7	10	7	10	1	0	3
	22	0	1	0	0	0	3	10	7	4	0	0	0
	6	0	5	0	0	7	6	8	8	10	8	2	3
	10	0	5	0	0	3	3	10	8	10	9	1	1
10	14	0	0	1	1	1	4	8	8	10	2	1	0
	16	1	0	1	1	5	3	8	10	10	3	3	1
	22	0	0	0	0	3	3	7	10	10	3	0	0
	6	0	0	0	0	3	3	6	8	10	7	2	0
	10	0	0	0	2	2	7	10	9	10	2	1	0
11	14	2	1	2	0	1	2	10	9	10	1	2	0
	16	1	2	2	0	3	3	9	8	10	2	3	0
	22	0	0	1	0	0	2	10	7	10	0	0	0
	6	0	3	2	2	0	10	10	10	10	10	2	1
	10	2	1	2	1	1	10	10	10	10	2	1	1
12	14	0	1	2	0	1	10	10	10	10	1	4	1
	16	0	2	5	0	1	10	10	10	10	1	3	1
	22	0	0	0	0	2	10	6	5	10	1	0	0
	6	0	2	2	0	6	10	10	8	10	7	6	3
	10	0	0	0	0	4	10	10	10	10	8	4	1
13	14	2	0	1	0	6	10	10	9	8	1	4	1
	16	1	0	1	0	4	10	10	10	5	1	3	1
	22	0	0	0	0	2	9	10	10	4	0	0	0
	6	2	5	1	0	1	10	8	10	6	9	3	2
	10	1	2	0	0	2	9	10	10	7	2	2	3
14	14	1	0	0	0	4	8	10	9	7	0	3	2
	16	1	5	0	0	3	9	10	4	8	1	1	0
	22	0	0	0	0	1	3	10	10	10	0	0	0
	6	3	5	3	0	2	3	10	10	7	5	3	3
	10	2	2	2	0	5	6	10	6	9	4	1	5
15	14	1	7	3	0	3	6	10	10	9	0	1	2
	16	0	8	4	0	4	3	10	10	8	1	1	1
	22	0	5	0	0	2	1	10	10	10	0	0	2

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	1	3	3	0	4	5	10	10	10	2	2	3
	10	2	3	6	0	4	4	10	10	8	1	2	2
16	14	2	0	3	0	3	1	10	10	10	2	0	1
	16	1	0	3	0	2	4	10	8	10	1	0	1
	22	0	0	0	0	2	2	10	6	10	7	0	0
	6	0	0	1	4	2	3	10	7	10	5	0	0
	10	0	0	0	0	3	2	10	7	10	2	0	0
17	14	0	0	0	0	0	4	6	8	8	2	0	0
	16	0	0	0	0	0	4	7	7	10	2	1	0
	22	0	0	0	2	2	2	7	10	10	1	0	0
	6	0	0	1	3	7	4	8	7	10	3	1	0
	10	0	0	0	3	3	4	9	9	10	9	0	0
18	14	0	0	0	1	2	8	10	8	6	7	0	1
	16	0	0	0	3	7	7	8	7	8	7	0	1
	22	0	0	0	0	1	2	9	10	10	9	0	1
	6	0	0	1	9	3	7	10	10	10	7	0	2
	10	0	0	1	3	3	7	5	10	9	3	0	0
19	14	2	0	0	1	0	7	7	10	6	4	0	0
	16	4	0	0	0	2	8	9	9	8	3	0	0
	22	0	0	0	0	2	4	10	4	10	5	0	0
	6	1	6	7	0	4	8	10	8	10	7	0	6
	10	4	5	0	0	1	8	10	10	10	6	0	7
20	14	4	1	0	0	1	7	10	8	10	5	0	6
	16	3	1	1	0	0	5	10	10	10	6	0	7
	22	0	0	0	0	1	4	10	8	10	1	1	0
	6	1	1	2	0	6	8	10	10	10	2	3	5
	10	4	1	0	0	3	6	10	10	10	0	2	3
21	14	1	1	0	0	6	7	10	10	10	0	1	2
	16	1	1	0	1	4	9	9	10	10	0	1	1
	22	0	0	0	0	2	8	8	10	10	0	0	0
	6	0	2	0	4	6	4	8	8	10	0	2	0
	10	0	2	0	4	5	6	10	10	10	0	1	0
22	14	0	1	0	1	1	7	10	10	9	1	1	0
	16	0	3	0	1	0	8	10	10	9	0	0	0
	22	0	5	0	0	6	3	10	10	9	0	1	0
	6	0	7	2	0	5	5	10	10	10	0	1	0
	10	0	2	1	0	2	5	10	10	4	0	3	0
23	14	0	0	1	0	2	7	10	10	4	1	1	2
	16	0	0	2	0	2	6	10	10	3	1	1	5
	22	0	0	1	0	6	3	10	8	2	3	1	1
	6	0	0	7	1	8	8	10	10	6	4	8	1
	10	0	0	0	1	9	7	10	6	6	1	6	1
24	14	0	0	2	1	2	6	10	7	2	1	1	2
	16	0	0	2	0	3	7	10	5	0	1	1	2
	22	0	0	2	0	4	6	6	9	1	2	0	0
	6	0	0	4	2	4	4	10	9	4	0	7	0
	10	0	0	0	1	4	7	10	10	7	0	7	0
25	14	1	0	1	2	1	4	10	10	2	1	5	0
	16	1	0	6	3	1	5	10	10	1	3	3	1
	22	0	0	7	2	7	7	10	10	2	4	1	0
	6	0	0	0	4	6	9	8	10	4	5	4	0
	10	0	0	0	1	4	9	10	9	5	2	9	0
26	14	0	0	2	0	0	9	9	10	3	4	6	0
	16	2	0	1	0	1	8	10	10	3	2	7	0
	22	0	0	3	0	4	7	8	8	2	2	4	0
	6	2	4	1	4	6	7	10	9	10	1	2	0
	10	4	3	0	2	1	5	10	9	5	2	3	0
27	14	3	1	0	0	0	6	10	7	10	6	1	0
	16	2	2	1	0	0	8	10	9	9	7	0	0
	22	4	1	2	0	0	7	10	10	10	3	0	0
	6	0	1	4	5	3	6	8	8	10	2	1	0
	10	5	0	3	1	4	8	9	9	8	2	0	0
28	14	2	1	2	0	6	8	10	8	3	6	2	0
	16	2	1	2	1	3	9	10	4	5	6	3	0
	22	0	0	10	0	4	8	9	9	4	3	0	0

EXTENT OF CLOUDY SKY, 1923—*concld.*

(THE WHOLE SKY CLOUDY IS RECKONED AS 10.)

Date.	Hours of observation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	6	4		1	5	7	8	10	10	6	4	2	0
	10	8		2	2	3	4	9	6	9	4	3	0
29	14	4		1	0	0	8	8	7	0	1	3	0
	16	8		0	0	0	6	10	10	2	0	5	0
	22	9		1	1	5	8	10	10	2	0	0	0
	6	9		4	3	8	10	10	10	2	2	7	0
	10	9		1	4	1	10	10	10	4	5	8	0
30	14	7		0	0	3	10	10	6	2	1	6	0
	16	2		0	1	4	10	10	5	1	0	6	0
	22	0		1	1	6	10	10	8	1	0	0	0
	6	0		5		7		10	9		2		0
	10	0		0		1		10	9		6		0
31	14	0		0		2		10	3		0		0
	16	0		0		3		10	5		0		0
	22	0		0		1		10	4		0		0
Mean .		1·0	1·3	1·3	1·4	2·9	5·7	9·5	8·8	6·8	2·7	1·5	1·4

TEMPERATURE OF THE GROUND, 1923.

Month.	In shade at the depths of										Exposed to the Sun at the depths of			
	1 inch.		9 inches.		20 inches.		60 inches.		132 inches.		1 inch.		8 inches.	
	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.	Mean temperature.	Excess over the yearly mean.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°
January . .	77·9	—4·6	78·7	—4·8	82·0	—4·0	84·4	—1·9	**82·4**	—1·2	86·7	—4·6	**79·8**	—7·4
February . .	77·1	—5·4	**78·5**	—5·0	**81·9**	—4·1	**83·8**	—2·5	83·5	—1·1	88·8	—2·5	81·2	—6·0
March . . .	83·0	+0·5	82·7	—0·8	84·2	—1·8	84·1	—2·2	83·7	—0·9	97·2	+5·9	89·2	+2·0
April . . .	85·4	+2·9	85·7	+2·2	87·4	+1·4	86·0	—0·3	84·1	—0·5	101·2	+9·9	95·1	+7·9
May . . .	87·0	+4·5	87·3	+3·8	89·1	+3·1	87·8	+1·5	85·2	+0·6	**105·0**	+13·7	**100·1**	+12·9
June . . .	**87·5**	+5·0	**88·4**	+4·9	**90·7**	+4·7	**89·1**	+2·8	**86·0**	+1·4	96·7	+5·4	96·2	+9·0
July . . .	82·4	—0·1	85·1	+1·6	88·2	+2·2	88·7	+2·4	85·5	+0·9	**82·3**	—9·0	83·6	—3·6
August . . .	82·2	—0·3	84·1	+0·6	86·7	+0·7	87·0	+0·7	85·0	+0·4	83·1	—8·2	84·0	—3·2
September . .	82·4	—0·1	83·9	+0·4	86·4	+0·4	86·5	+0·2	85·0	+0·4	85·9	—5·4	84·5	—2·7
October . .	84·4	+1·9	84·8	+1·3	86·7	+0·7	86·3	0·0	84·8	+0·2	94·5	+3·2	87·6	+0·4
November . .	80·8	—1·7	82·3	—1·2	85·5	—0·5	86·4	+0·1	84·7	+0·1	87·8	—3·5	83·6	—3·6
December . .	79·8	—2·7	80·7	—2·8	84·0	—2·0	85·6	—0·7	84·5	—0·1	86·1	—5·2	81·6	—5·6
Year . . .	82·5		83·5		86·0		86·3		84·6		91·3		87·2	

Diurnal variation of magnetic elements.

The following tables give the diurnal variation of D, H, (the same as of X owing to D being very small), Z, Y, I and F for each month based on the hourly tabulations for the 5 international quiet days. The days are reckoned from 4 h. 51 m. to 3 h. 51 m. of the local mean time corresponding to the Greenwich civil day 0 h. to 23 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulæ :

$$\begin{aligned}
\triangle X &= 1{\cdot}000\,\triangle H - 0{\cdot}028\,\triangle D \\
\triangle Y &= 0{\cdot}003\,\triangle H + 10{\cdot}760\,\triangle D. \\
\triangle I &= 0{\cdot}076\,\triangle Z - 0{\cdot}036\,\triangle H. \\
\triangle F &= 0{\cdot}905\,\triangle H + 0{\cdot}425\,\triangle Z.
\end{aligned}$$

A plus sign indicates an hourly value greater than the mean for the day.

Owing to very small value of $\triangle$ D the variation tables of H and X are practically the same. No separate table for $\triangle$ X has consequently been given.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns :— I January, February, November, December ; II March April, September, October ; III May, June, July, August.

All diurnal inequalities have been corrected for the aperiodic change by the formula $\frac{N(12-n)}{24}$ where N denotes the excess at the second midnight of the representative day as compared to the first midnight and n denotes any hour of the day reckoned from 0 (first midnight) to 24.

DIURNAL VARIATION OF D, 1923.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	—0·4	—0·5	—0·3	+0·3	+0·4	+0·3	+0·6	+0·5	+0·3	+0·1	—0·2	—0·3	—0·3	+0·1	+0·5	+0·1
1	—0·6	**—0·7**	—0·2	+0·3	+0·9	+0·8	+1·0	+1·1	+0·8	+0·1	—0·2	—0·4	—0·5	+0·3	+1·0	+0·3
2	**—0·9**	—0·7	+0·1	+0·9	+1·6	+1·7	**+1·8**	**+1·9**	+1·7	+0·9	**—0·8**	**—0·7**	**—0·7**	+0·9	+1·6	+0·6
3	—0·7	0	+0·8	+1·2	**+1·8**	**+2·1**	+1·3	+1·9	**+1·9**	**+1·5**	—0·1	—0·6	—0·3	**+1·4**	**+1·8**	**+0·9**
4	+0·1	+0·8	**+1·1**	**+1·8**	+1·3	+2·0	+1·1	+1·0	+1·1	+1·3	+0·3	—0·3	+0·2	+1·2	+1·4	+0·9
5	**+0·5**	**+1·0**	+1·0	+0·7	+0·1	+0·8	+0·7	0	—0·3	+0·1	+0·2	—0·1	**+0·4**	+0·4	+0·4	+0·4
6	+0·1	+0·6	+0·3	—0·6	—1·1	—0·9	—0·3	—1·2	—1·4	—1·3	—0·3	—0·2	+0·1	—0·7	—0·9	—0·5
7	—0·2	+0·1	—0·6	—1·5	**—2·0**	—2·0	—1·1	**—2·0**	—2·1	**—1·7**	—0·3	—0·1	—0·1	—1·5	—1·8	—1·1
8	0	—0·3	**—1·1**	**—1·6**	—2·0	**—2·3**	—1·5	—2·0	**—2·3**	—1·4	+0·1	+0·4	0	**—1·6**	**—1·9**	**—1·2**
9	+0·2	0	—0·8	—1·4	—1·4	—2·0	—1·5	—1·5	—1·6	—0·8	**+0·5**	**+0·6**	+0·3	—1·1	—1·6	—0·8
10	+0·4	0	+0·1	—0·7	—0·8	—1·4	—1·1	—1·0	—0·4	0	+0·4	+0·3	+0·3	—0·3	—1·1	—0·4
11	+0·4	+0·1	+0·4	—0·2	0	—0·6	—0·6	—0·1	+0·4	+0·5	+0·3	+0·1	+0·2	+0·3	—0·3	+0·1
12	+0·4	0	+0·4	+0·1	+0·5	—0·1	0	+0·5	+0·4	+0·4	+0·1	+0·2	+0·2	+0·3	+0·2	+0·2
13	+0·3	—0·1	0	+0·1	+0·2	+0·1	+0·1	+0·4	—0·1	+0·1	—0·1	+0·3	+0·1	0	+0·2	+0·1
14	+0·2	0	—0·1	—0·1	—0·1	—0·1	—0·2	—0·1	—0·1	0	0	+0·2	+0·1	—0·1	—0·1	0
15	+0·1	0	—0·1	—0·2	—0·2	—0·2	—0·3	—0·2	—0·1	0	—0·1	+0·2	+0·1	—0·1	—0·2	—0·1
16	+0·1	0	—0·1	—0·1	—0·2	—0·1	—0·3	—0·2	0	+0·1	0	+0·1	0	—0·1	—0·2	—0·1
17	+0·1	0	—0·1	0	0	+0·1	—0·2	—0·1	+0·1	0	0	+0·1	0	0	—0·1	0
18	+0·1	0	—0·1	+0·1	+0·1	+0·3	—0·1	0	+0·3	0	+0·1	+0·1	+0·1	+0·1	+0·1	+0·1
19	+0·1	0	—0·1	+0·2	+0·1	+0·2	—0·1	+0·1	+0·3	0	+0·1	+0·2	+0·1	+0·1	+0·1	+0·1
20	+0·1	0	—0·1	+0·2	+0·3	+0·3	+0·2	+0·1	+0·3	+0·1	0	+0·1	+0·1	+0·1	+0·2	+0·1
21	+0·1	0	—0·1	+0·3	+0·2	+0·4	+0·3	+0·2	+0·3	0	0	0	0	+0·1	+0·3	+0·1
22	—0·1	—0·1	—0·1	+0·4	+0·2	+0·3	+0·4	+0·3	+0·3	0	0	—0·1	—0·1	+0·1	+0·3	+0·1
23	—0·2	—0·3	—0·2	+0·3	+0·2	+0·3	+0·4	+0·3	+0·3	0	—0·1	—0·1	—0·2	+0·1	+0·3	+0·1

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−5	−6	−6	−8	−8	−5	−11	−9	−1	−5	−5	−6	−5	−5	−8	−6
1	−4	−4	−7	−6	−8	−3	−10	−9	−3	−5	−3	−3	−4	−5	−7	−5
2	−2	−2	−7	−3	−5	+2	−3	−5	−6	−4	0	+2	0	−5	−3	−3
3	+4	+5	0	+5	+1	+11	+6	−1	−7	−1	+8	+8	+6	−1	+5	+3
4	+11	+11	+10	+19	+9	+18	+15	+7	−1	+7	+16	+11	+12	+9	+12	+11
5	+17	+17	+18	+28	+17	+28	+24	+16	+7	+16	+23	+15	+18	+17	+21	+19
6	**+21**	**+20**	+26	+29	**+22**	+37	**+31**	+21	+13	**+23**	**+27**	**+18**	**+22**	**+23**	+27	**+24**
7	+19	+19	**+31**	+24	+21	**+38**	+31	+22	**+16**	+19	+23	+12	+18	+22	**+28**	+23
8	+13	+13	+25	+17	+19	+34	+28	+22	+13	+13	+13	+7	+11	+17	+26	+18
9	+9	+7	+17	+10	+14	+27	+22	+17	+9	+4	+4	+3	+6	+10	+20	+12
10	+4	+4	+9	+3	+9	+15	+11	+10	+1	0	−2	+1	+2	+3	+11	+5
11	0	−1	+1	−1	+1	+5	+1	+5	−3	−2	−5	0	−1	−1	+3	0
12	−4	−4	−3	−6	−3	−3	−7	−2	−4	−3	−6	−4	−5	−4	−4	−4
13	−6	−6	−6	−7	−6	−6	−11	−7	−4	−4	−7	−6	−7	−5	−7	−6
14	−7	−5	−8	−9	−8	**−7**	−13	−8	−5	−6	−8	−6	−7	−7	−9	−8
15	−8	−7	−9	−10	−8	−7	−14	**−9**	−6	**−8**	−8	−6	−7	−8	−9	−8
16	**−9**	−8	−12	−10	**−9**	−7	−14	−9	−5	−7	−9	−6	−8	**−9**	**−10**	**−9**
17	−9	**−9**	**−13**	**−11**	−9	−6	−14	−9	−4	−7	**−10**	**−7**	**−9**	−9	−10	−9
18	−8	−8	−13	−11	−8	−7	−13	−9	−4	−6	−9	−7	−8	−8	−9	−9
19	−8	−8	−13	−10	−8	−5	−12	−9	−3	−5	−9	−7	−8	−8	−9	−8
20	−7	−7	−12	−11	−9	−6	−12	−8	−2	−5	−10	−4	−7	−7	−9	−8
21	−9	−7	−11	−11	−8	−5	−12	−7	−1	−5	−8	−6	−7	−7	−8	−8
22	−7	−7	−9	−11	−9	−5	−12	−8	0	−5	−8	−5	−7	−6	−9	−7
23	−6	−7	−8	−10	−8	−6	−11	−9	−1	−4	−7	−5	−6	−6	−8	−7

DIURNAL VARIATION OF Y, 1923.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−4	−5	−3	+3	+4	+4	+6	+6	+4	+1	−2	−3	−3	+1	+5	+1
1	−7	−7	−2	+3	+10	+9	+11	+12	+9	+1	−2	−5	−5	+3	+10	+3
2	**−10**	**−8**	+1	+10	+17	+18	**+14**	+20	+18	+10	−3	**−8**	−7	+10	+17	+7
3	−7	0	+8	**+13**	**+20**	**+23**	+14	**+21**	**+21**	**+17**	−1	−7	−4	**+15**	**+19**	**+10**
4	+1	+8	**+12**	+13	+14	+21	+12	+11	+11	+14	+3	−3	+2	+13	+15	+10
5	+5	**+11**	+11	+8	+2	+8	+7	0	−3	+1	+2	−2	**+4**	+4	+5	+4
6	+2	+7	+4	−6	−12	−10	−3	−13	−15	−14	**−4**	−2	+1	−8	−9	−5
7	−2	+1	−6	−16	**−22**	−21	−11	**−21**	−23	**−18**	−4	−1	−1	−16	−19	−12
8	0	**−4**	**−12**	**−18**	−21	**−24**	**−16**	−21	**−25**	−15	+1	+4	0	**−17**	**−21**	**−13**
9	+2	0	−9	−15	−15	−22	−16	−17	−17	−9	**+5**	**+6**	+3	−12	−17	−9
10	+4	0	+1	−7	−8	−15	−12	−10	−5	0	+4	+4	+3	−3	−11	−4
11	**+5**	+1	+4	−3	0	−6	−7	−1	+4	+5	+3	+1	+3	+3	−3	+1
12	+5	0	+4	+1	+5	−1	0	+5	+4	+4	+1	+3	+2	+3	+2	+3
13	+3	−2	0	+1	+2	+2	+1	+4	−1	+1	−1	+3	+1	0	+2	+1
14	+2	0	−1	−1	−2	−1	−2	−1	−1	0	0	+3	+1	−1	−1	0
15	+2	0	−2	−2	−2	−2	−4	−3	−2	0	−1	+2	+1	−1	−3	−1
16	+1	0	−1	−1	−2	−1	−3	−3	0	+1	0	+1	+1	−1	−2	−1
17	+1	0	−1	0	0	+1	−2	−1	+1	0	0	+1	0	0	−1	0
18	+1	0	−1	+1	+1	+3	−1	0	+3	0	+1	+1	+1	+1	+1	+1
19	+1	0	−1	+2	+1	+3	−1	+1	+3	0	+1	+2	+1	+1	+1	+1
20	+1	0	−1	+3	+3	+3	+2	+2	+3	**+1**	0	+2	+1	+1	+2	+1
21	+1	0	−1	+4	+2	+4	+3	+2	+4	0	0	0	0	+2	+3	+2
22	−1	−2	−1	+4	+2	+3	+4	+3	+4	0	0	−1	−1	+2	+3	+1
23	−2	−3	−2	+3	+2	+3	+5	+4	+3	0	−1	−1	−2	+1	+3	+1

[INTERNATIONAL QUIET DAYS,* GREENWICH MEAN TIME.]

Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	—1	+1	0	+3	+5	+4	+3	+4	+6	+4	+3	—1	0	+3	+4	+3
1	—2	+1	+2	+5	+9	+9	+6	+9	+11	+5	+3	—1	+1	+6	+8	+5
2	—2	+2	+5	+6	+8	+11	+5	+10	+9	+9	+3	—2	0	+8	+8	+5
3	+3	+6	+4	+2	+2	+7	+4	+4	—2	+4	+6	+1	+4	+3	+4	+3
4	+7	+4	+1	—3	—8	—3	0	—6	—16	—7	+3	+1	+4	—5	—5	—2
5	+1	0	—5	—10	—19	—17	—5	—10	—23	—17	—3	—1	—1	—13	—13	—9
6	—3	—8	—10	—16	—20	—23	—10	—16	—24	—21	—7	—2	—5	—18	—17	—13
7	—4	—10	—11	—14	—15	—19	—10	—15	—20	—13	—5	—1	—5	—15	—15	—11
8	+1	—7	—6	—7	—8	—13	—8	—9	—9	—5	—1	+2	—1	—7	—9	—6
9	+1	—2	+2	—1	—1	—5	—4	—4	+1	+1	—2	+2	0	0	—3	—1
10	+1	—3	+6	+3	+5	+2	—1	+1	+8	+4	—4	—1	—2	+5	+2	+2
11	+2	0	+4	+2	+6	+7	+4	+5	+9	+4	—3	—1	—1	+4	+5	+3
12	0	—1	+2	+2	+4	+7	+6	+5	+5	+1	—3	+2	0	+2	+5	+2
13	0	—1	—1	+1	+1	+4	+2	+1	0	+1	—1	+2	0	0	+2	+1
14	0	+1	0	0	+1	+1	—1	—1	+2	+1	0	+1	+1	+1	0	0
15	0	+1	0	+1	+2	+1	—1	—1	+3	+2	+1	+1	+1	+1	0	+1
16	0	+1	+1	+2	+3	+3	0	+1	+4	+3	+1	0	0	+2	+2	+1
17	0	+1	+1	+3	+4	+4	+1	+3	+5	+3	+1	0	+1	+3	+3	+2
18	0	+3	+1	+3	+4	+4	+2	+3	+6	+4	+1	0	+1	+4	+3	+3
19	0	+3	+1	+4	+4	+3	+2	+3	+5	+3	+2	0	+1	+4	+3	+3
20	0	+3	+1	+3	+4	+3	+2	+3	+6	+3	+2	0	+1	+3	+3	+3
21	0	+2	+1	+3	+4	+3	+2	+4	+6	+3	+1	—1	+1	+3	+3	+2
22	—1	+2	+1	+3	+3	+3	+1	+3	+5	+4	+2	—1	0	+3	+3	+2
23	—2	+1	+1	+3	+4	+3	+2	+3	+5	+4	+2	0	0	+3	+3	+2

*V. F. magnetograph was under adjustment on the 21st and 22nd September which are international quiet days. Curves for two locally selected quiet days, namely, 4th and 24th, were used instead of those for September 21st and 22nd for the calculation of $\triangle$Z for this month.

DIURNAL VARIATION OF I, 1923.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	+0·1	+0·3	+0·3	+0·5	+0·7	+0·5	+0·6	+0·6	+0·5	+0·5	+0·4	+0·2	+0·2	+0·4	+0·6	+0·4
1	0	+0·2	+0·4	+0·6	+0·9	+0·8	+0·8	+1·0	+0·9	+0·6	+0·4	0	+0·2	+0·6	+0·9	+0·5
2	—0·1	+0·2	+0·6	+0·6	+0·8	+0·8	+0·5	+1·0	+0·9	+0·8	+0·3	—0·2	0	+0·7	+0·7	+0·5
3	+0·1	+0·3	+0·3	0	+0·1	+0·1	0	+0·3	+0·1	+0·4	+0·1	—0·2	+0·1	+0·2	+0·1	+0·1
4	+0·2	—0·1	—0·3	—0·9	—1·0	—0·9	—0·6	—0·7	—1·2	—0·8	—0·3	—0·3	—0·1	—0·8	—0·8	—0·6
5	—0·5	—0·6	—1·0	—1·7	—2·1	—2·3	—1·2	—1·4	—2·0	—1·9	—1·1	—0·7	—0·7	—1·7	—1·7	—1·4
6	—1·0	—1·3	—1·7	—2·3	—2·3	—3·1	—1·8	—2·0	—2·3	—2·4	—1·5	—0·8	—1·2	—2·2	—2·3	—1·9
7	—1·0	—1·5	—1·9	—1·9	—1·9	—2·8	—1·9	—1·9	—2·1	—1·7	—1·2	—0·5	—1·0	—1·9	—2·1	—1·7
8	—0·4	—1·0	—1·4	—1·1	—1·3	—2·2	—1·6	—1·5	—1·1	—0·8	—0·5	—0·1	—0·5	—1·1	—1·7	—1·1
9	—0·3	—0·4	—0·5	—0·4	—0·6	—1·3	—1·1	—0·9	—0·3	—0·1	—0·3	0	—0·2	—0·3	—1·0	—0·5
10	—0·1	—0·4	+0·1	+0·1	0	—0·4	—0·5	—0·3	+0·5	+0·3	—0·3	—0·1	—0·2	+0·3	—0·3	—0·1
11	+0·1	0	+0·2	+0·2	+0·4	+0·4	+0·3	+0·2	+0·7	+0·4	—0·1	—0·1	0	+0·4	+0·3	+0·2
12	+0·2	0	+0·2	+0·4	+0·4	+0·6	+0·7	+0·4	+0·5	+0·2	0	+0·3	+0·1	+0·3	+0·5	+0·3
13	+0·2	+0·2	+0·1	+0·3	+0·3	+0·5	+0·6	+0·3	+0·1	+0·2	+0·2	+0·4	+0·2	+0·2	+0·4	+0·3
14	+0·3	+0·3	+0·3	+0·3	+0·3	+0·3	+0·4	+0·2	+0·3	+0·3	+0·3	+0·3	+0·3	+0·3	+0·3	+0·3
15	+0·3	+0·4	+0·4	+0·4	+0·4	+0·4	+0·4	+0·3	+0·4	+0·4	+0·3	+0·3	+0·3	+0·4	+0·4	+0·3
16	+0·3	+0·4	+0·5	+0·5	+0·5	+0·5	+0·5	+0·4	+0·5	+0·5	+0·4	+0·2	+0·3	+0·5	+0·5	+0·4
17	+0·3	+0·4	+0·5	+0·7	+0·6	+0·5	+0·6	+0·5	+0·5	+0·5	+0·4	+0·3	+0·4	+0·5	+0·6	+0·5
18	+0·3	+0·5	+0·6	+0·6	+0·6	+0·5	+0·6	+0·6	+0·6	+0·5	+0·4	+0·3	+0·3	+0·6	+0·6	+0·5
19	+0·3	+0·5	+0·6	+0·7	+0·6	+0·5	+0·6	+0·6	+0·5	+0·4	+0·5	+0·3	+0·4	+0·6	+0·6	+0·5
20	+0·3	+0·5	+0·5	+0·7	+0·6	+0·5	+0·6	+0·5	+0·5	+0·4	+0·5	+0·1	+0·3	+0·5	+0·5	+0·5
21	+0·3	+0·5	+0·5	+0·7	+0·5	+0·4	+0·6	+0·5	+0·5	+0·4	+0·4	+0·1	+0·3	+0·5	+0·5	+0·5
22	+0·1	+0·4	+0·4	+0·6	+0·6	+0·4	+0·5	+0·5	+0·4	+0·4	+0·4	+0·1	+0·3	+0·5	+0·5	+0·4
23	+0·1	+0·3	+0·3	+0·6	+0·6	+0·4	+0·5	+0·6	+0·4	+0·4	+0·4	+0·2	+0·2	+0·4	+0·5	+0·4

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−5	−5	−5	−6	−5	−3	−9	−6	+2	−2	−4	−5	−5	−3	−6	−5
1	−4	−3	−5	−4	−3	+1	−7	−5	+2	−2	−2	−3	−3	−2	−3	−3
2	−3	−1	−4	0	−1	+6	−1	−1	−2	0	+2	+1	0	−1	+1	0
3	+5	+7	+2	+5	+2	+13	+7	+1	**−8**	0	+9	+7	+7	0	+6	+4
4	+13	+12	+9	+16	+5	+15	+13	+4	−7	+3	+16	+11	+13	+5	+9	+19
5	+16	**+16**	+14	**+21**	+7	+19	+20	+10	−3	+7	+20	+13	+16	+10	+14	**+13**
6	**+18**	+15	+19	+20	+11	+23	+23	+12	+1	**+12**	**+21**	+16	**+17**	+13	+17	+16
7	+15	+13	**+23**	+16	+13	**+26**	**+24**	+14	+6	+12	+19	+11	+14	**+14**	**+19**	+16
8	+12	+9	+21	+12	**+14**	+26	+22	**+16**	**+8**	+9	+11	+7	+10	+13	+19	+14
9	+9	+5	+16	+9	+12	+22	+18	+13	+8	+4	+2	+4	+5	+9	+17	0
10	+4	+2	+11	+4	+10	+15	+10	+9	+4	+2	−3	+1	+1	+5	+11	+6
11	+1	0	+3	0	+3	+7	+3	+6	+1	0	−6	0	−1	+1	+5	−1
12	−3	−5	−2	−4	−1	+1	−4	0	−1	−2	−7	−3	−4	−3	−1	−3
13	−6	−6	−6	−5	−5	−4	−9	−5	−3	−3	−7	−4	−6	−5	−6	−5
14	−6	−4	−7	−8	**−7**	**−6**	**−13**	**−8**	−4	−5	−7	−5	−6	−6	**−8**	**−7**
15	−7	−6	−8	**−9**	−7	−6	−13	−8	−4	**−7**	−7	−5	−6	**−7**	−8	−7
16	**−8**	**−7**	**−11**	−8	−7	−6	−13	−8	−3	−5	**−8**	**−6**	−7	−7	−8	−7
17	−8	−7	−11	−9	−6	−4	−13	−7	−1	−5	−8	−6	**−8**	−7	−7	−7
18	−7	−6	−11	−8	−6	−5	−11	−7	−1	−4	−7	−6	−7	−6	−7	−7
19	−7	−6	−11	−8	−6	−4	−10	−7	−1	−3	−7	−6	−7	−6	−7	−6
20	−7	−5	−10	−8	−6	−4	−10	−6	+1	−3	−8	−4	−6	−5	−7	−6
21	−8	−6	−10	−9	−5	−3	−10	**−5**	+2	−3	−7	−5	−7	−5	−6	−6
22	−7	−6	−8	−8	−7	−4	−10	−6	+2	−3	−7	−5	−6	−4	−7	−6
23	−6	−6	−7	−8	−6	−4	−9	−7	+1	−2	−5	−5	−6	−4	−6	−5

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Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	11·1	10·8	10·7	10·5	10·7	12·4	11·6	9·9	10·5	10·7	10·9	10·7	10·9	10 40	12·7	14 0	9·6
2	10·7	10·6	10·2	10·0	9·8	11·4	11·4	10·8	10·9	11·1	11·2	11·0	10·8	10 40	12·0	7 0	9·6
3	11·2	11·2	10·5	10·0	9·8	10·4	10·5	10·9	10·9	11·4	11·2	11·1	10·7	18 20	11·8	6 56	9·6
4	11·0	10·6	10·5	10·2	9·6	10·1	10·1	10·0	11·1	10·7	11·0	10·9	10·5	15 16	11·4	7 30	9·3
5	11·3	11·4	11·4	10·4	10·0	11·2	11·5	10·9	11·3	10·9	11·0	11·0	11·0	11 20	11·7	7 12	9·6
6	11·2	11·1	10·9	10·3	9·5	10·8	10·4	9·3	11·0	10·9	10·8	10·9	10·6	10 32	11·8	13 0	9·1
7†	11·0	11·6	11·1	10·5	10·5	11·9	12·2	11·5	10·8	11·1	11·1	11·0	**11·1**	11 40	12·4	7 10	10·1
8†	11·1	11·2	11·1	10·5	10·3	10·2	9·3	9·7	11·0	10·9	10·8	10·7	10·6	16 40	11·6	11 20	8·9
9	10·9	10·7	10·4	10·2	9·9	10·9	10·4	10·4	10·5	10·9	10·7	11·1	10·6	17 10	11·2	7 10	9·6
10	10·9	10·8	10·3	10·1	10·5	10·9	9·9	10·5	10·9	10·6	10·8	10·8	10·6	9 36	11·3	12 4	9·7
11	10·9	10·9	10·7	10·5	10·0	10·6	9·5	10·8	11·5	11·2	10·9	10·8	10·7	16 8	11·7	11 36	9·3
12	10·5	10·3	10·1	9·7	11·0	11·9	10·1	9·5	10·9	10·9	10·9	10·8	10·5	9 8	12·4	13 20	8·9
13	10·5	10·5	10·3	10·0	10·5	10·7	9·9	9·4	11·0	10·9	11·0	10·7	10·5	9 8	11·5	13 40	8·8
14	10·5	10·1	9·9	9·5	11·1	11·9	10·9	10·4	10·6	11·1	10·8	10·6	10·6	9 30	12·3	5 8	9·2
15	10·5	10·2	9·9	10·0	10·8	11·5	10·1	11·5	10·5	10·6	10·6	10·6	10·5	9 10	12·6	3 24	9·6
16	10·5	10·4	10·1	9·7	10·4	11·9	11·5	11·9	11·3	10·4	10·5	10·4	10·8	13 10	12·4	6 40	9·5
17	10·4	10·3	10·1	9·6	9·7	10·9	8·8	10·4	10·7	10·1	10·3	10·4	**10·1**	9 28	11·0	11 40	8·5
18†	10·4	10·3	9·9	9·2	8·9	10·4	9·9	9·9	10·6	10·4	10·4	10·4	10·1	15 56	10·8	7 10	8·3
19†	10·6	10·6	10·1	9·3	8·9	10·1	10·0	11·5	11·5	10·7	10·5	10·4	10·3	14 30	11·8	7 40	8·5
20	10·5	10·3	10·1	9·6	9·6	10·6	9·4	9·7	11·8	10·6	10·7	10·1	10·3	15 40	12·0	6 40	9·1
21	10·9	10·3	10·1	9·5	9·6	10·7	10·4	11·0	10·9	10·7	10·7	10·8	10·5	16 40	11·5	7 20	8·8
22	10·5	10·6	10·1	9·5	10·5	9·9	9·3	10·7	11·8	10·5	10·4	10·6	10·4	15 44	12·0	11 32	9·1
23	10·5	10·7	10·7	10·1	10·4	11·0	10·4	10·4	11·8	11·5	10·7	10·3	10·7	16 40	12·5	7 4	9·9
24	10·5	10·4	10·1	10·3	10·4	8·8	8·3	10·1	11·4	11·0	10·7	10·4	10·2	15 56	11·5	10 48	**7·4**
25	10·2	10·5	10·4	10·5	11·7	12·7	8·7	9·1	10·6	10·9	10·8	10·6	10·6	9 20	13·2	11 36	8·1
26	10·5	10·3	10·1	10·1	11·3	13·4	9·6	8·9	10·0	10·3	10·2	10·0	10·3	9 30	**13·6**	13 4	8·5
27†	9·9	10·0	9·7	9·7	10·3	12·1	10·1	10·7	10·8	10·9	10·7	10·4	10·5	10 4	12·2	5 40	9·4
28	10·3	10·2	9·9	10·0	10·5	11·4	10·4	10·3	10·3	10·8	10·6	10·4	10·4	9 48	11·5	5 4	9·7
29	10·3	10·2	10·0	9·7	9·5	9·9	10·1	10·3	10·6	10·5	10·6	10·8	10·3	23 4	10·9	7 0	9·3
30	10·8	10·4	10·4	9·7	9·5	11·6	11·3	11·3	10·7	10·6	10·9	10·8	10·7	10 24	11·7	7 30	9·3
31	10·6	10·3	10·2	9·6	10·2	11·7	9·5	10·4	11·3	10·3	10·7	10·8	10·5	10 8	11·8	11 48	9·3
Mean .	10·7	10·6	10·3	10·0	10·2	11·1	10·2	10·4	11·0	10·8	10·7	10·7	10·5				
Mean† .	10·6	10·7	10·4	9·9	9·8	11·0	10·3	10·7	10·9	10·8	10·7	10·6	10·5				

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1	10·7	10·4	10·2	9·8	10·7	11·1	10·4	10·2	10·5	9·7	10·5	10·9	10·4	9 10	11·4	5 40	9·3
2	10·6	10·6	10·3	9·6	10·3	11·0	10·0	9·8	10·8	10·4	10·8	10·7	10·4	9 40	11·3	6 30	9·3
3	10·7	10·6	10·2	10·1	10·7	10·9	9·8	10·2	10·9	10·5	10·9	10·9	10·5	9 12	11·4	6 40	9·4
4	10·7	10·7	10·7	9·9	10·5	11·4	9·7	10·6	11·2	10·8	10·6	10·9	**10·7**	9 36	11·4	12 0	9·4
5	10·6	10·5	10·7	10·5	10·4	10·5	9·6	10·4	10·5	10·2	10·3	10·2	10·4	8 48	11·3	11 48	9·4
6	10·3	10·3	10·2	9·9	9·9	11·3	10·2	10·0	10·7	10·9	10·5	10·4	10·4	9 51	11·3	6 18	9·6
7	10·3	10·4	10·2	10·0	9·9	11·1	9·6	10·5	11·2	11·1	11·1	11·2	10·6	21 30	11·3	12 20	9·3
8	10·6	10·9	10·3	9·7	9·9	10·6	10·8	10·5	11·0	11·1	10·7	10·6	10·6	17 28	11·3	6 40	9·3
9†	10·7	10·4	10·2	10·1	10·6	11·7	10·8	10·1	10·5	10·6	10·5	10·4	10·5	9 36	11·9	6 10	9·9
10	10·3	10·5	10·1	9·7	10·0	11·3	10·9	10·0	11·1	10·9	10·5	10·5	10·5	16 52	12·2	6 40	9·4
11	10·7	10·5	10·2	9·8	10·4	11·5	10·3	10·1	10·2	10·3	10·6	10·3	10·4	9 44	11·6	6 30	9·5
12†	10·3	10·3	9·9	9·5	10·2	11·0	10·5	10·3	9·7	9·9	10·3	10·2	10·1	10 40	11·3	5 40	9·0
13†	10·2	10·1	9·7	9·2	9·9	11·8	11·2	10·4	10·6	9·6	9·9	10·1	10·2	10 8	12·0	6 40	8·9
14	10·0	9·7	9·4	8·9	9·6	11·0	9·7	9·6	10·8	10·3	10·4	10·3	**10·0**	9 36	11·5	7 20	8·5
15	10·3	10·3	10·1	9·7	9·8	11·6	10·5	9·9	10·6	10·6	10·4	10·5	10·4	10 20	11·9	6 40	9·1
16	10·7	10·5	10·2	9·7	10·1	10·6	9·7	8·5	9·8	10·3	10·6	11·1	10·2	22 20	11·2	14 0	**8·4**
17	10·7	10·8	10·3	10·0	10·5	11·4	10·6	9·4	11·1	10·6	10·7	10·3	10·6	9 36	11·7	6 40	8·8
18	11·1	11·2	10·4	9·8	10·0	10·9	10·5	11·2	11·1	10·7	10·7	10·7	10·6	13 30	11·9	6 44	9·2
19	10·8	10·8	10·5	10·4	11·0	11·3	10·3	9·7	10·3	10·4	10·9	10·4	10·6	9 8	11·9	13 20	9·6
20	10·7	10·7	10·4	9·7	10·4	11·0	10·5	10·9	10·9	9·9	10·4	10·6	10·5	9 36	11·3	6 10	9·5
21†	10·4	10·4	10·1	9·8	10·6	11·3	9·3	10·8	11·1	10·4	10·4	10·2	10·4	9 10	11·5	12 20	9.1
22	10·2	10·1	9·9	9·8	10·7	11·0	9·4	10·0	10·3	10·2	10·4	10·4	10·2	8 40	11·9	12 30	8·9
23†	10·3	10·2	10·1	9·9	10·5	11·1	10·2	10·1	10·2	9·9	10·1	10·2	10·2	9 36	11·2	12 40	9·7
24	10·1	10·0	9·7	9·6	10·9	11·8	10·0	9·9	10·2	10·0	10·0	10·0	10·2	9 34	12·0	5 52	9·4
25	9·9	9·9	9·6	9·3	9·0	10·4	10·5	10·5	10·5	10·4	10·5	10·1	10·1	14 12	11·3	6 56	8·7
26	11·1	12·3	10·1	9·5	9·5	10·1	8·6	10·2	10·7	10·7	10·2	10·2	10·4	1 40	**12·5**	11 56	8·5
27	10·4	10·5	10·4	10·2	10·1	10·6	9·8	11·1	11·6	10·8	11·2	10·5	10·6	15 0	12·2	12 20	9·6
28	10·9	10·6	10·1	10·2	10·5	10·4	10·4	10·2	10·6	10·2	10·3	10·4	10·4	1 4	11·7	19 16	9·9
Mean .	10·5	10·5	10·1	9·8	10·2	11·1	10·1	10·2	10·7	10·4	10·5	10·5	10·4				
Mean† .	10·4	10·3	10·0	9·7	10·3	11·4	10·4	10·3	10·4	10·1	10·2	10·2	10·3				

*The daily mean ordinates derived from 24 hourly tabulations of the declination magnetograms and corrected for progressive change by 1/48 of the difference between the ordinates corresponding to the initial and the terminal hours are next converted into angle by the factor 10·28 which is equal to 1 cm′. of ordinate on photographic paper; and finally these converted ordinates added to the adopted base-line values give the absolute values of the daily means of declination.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

MARCH. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H.M.	′
1	10·6	10·6	10·9	10·3	11·2	10·8	9·3	8·8	10·3	10·0	10·1	10·2	10·3	4 20	11·5	12 40	8·5
2	10·2	10·2	10·0	9·9	10·3	10·8	8·8	8·9	10·4	9·8	9·9	10·1	9·9	9 40	11·1	12 40	8·0
3	10·4	10·2	10·1	9·7	10·6	10·1	8·6	9·5	10·9	10·4	10·1	10·2	10·1	16 30	11·2	12 20	8·0
4	10·2	10·3	10·3	9·9	11·2	10·3	8·7	9·0	10·5	10·0	9·9	10·0	10·1	7 56	11·3	13 20	8·4
5	10·1	10·2	10·3	10·4	11·3	9·9	8·1	9·2	10·7	9·7	9·8	9·8	9·9	7 48	11·4	11 52	7·9
6	10·0	10·0	10·0	9·9	10·9	10·9	9·7	9·5	10·6	10·4	9·9	9·7	10·1	8 10	11·4	12 20	9·3
7	9·8	9·9	9·8	9·7	10·4	10·3	8·8	9·2	10·5	10·2	10·1	10·0	9·9	9 0	11·3	12 24	8·6
†8	10·0	9·8	9·7	10·0	10·6	9·8	8·6	8·7	9·9	10·0	9·7	9·6	9·7	7 30	10·8	12 30	7·9
†9	9·9	9·8	9·7	9·6	10·6	10·6	8·9	8·9	10·2	9·6	9·6	9·5	9·7	9 4	11·3	11 20	8·6
†10	9·5	9·6	9·5	9·5	10·3	11·4	9·9	9·6	10·2	9·5	9·5	9·6	9·9	9 28	11·6	12 48	9·2
†11	9·6	9·6	9·5	9·5	10·8	11·5	9·9	9·6	10·8	9·5	9·6	9·9	10·0	10 2	11·8	12 20	9·0
12	9·6	9·6	9·4	9·4	10·3	10·6	8·9	8·9	10·3	9·6	9·6	9·5	9·7	8 16	11·0	12 20	8·2
13	9·7	9·5	9·4	9·5	11·4	11·2	9·2	8·8	10·6	10·3	9·9	9·8	9·9	8 40	12·1	12 40	8·3
14	9·9	9·8	9·8	9·9	11·9	11·9	8·3	9·0	10·7	10·1	9·7	9·6	10·0	8 20	12·6	12 4	8·1
15	9·7	9·6	9·9	10·0	11·4	10·6	9·1	8·6	9·9	10·1	9·8	9·9	9·9	7 20	11·4	13 30	8·5
16	10·0	9·8	9·7	9·8	11·3	12·2	9·3	9·2	11·1	10·7	10·0	9·9	10·2	9 4	12·4	12 24	8·2
17	9·9	9·6	9·7	10·2	11·4	11·1	8·2	7·9	9·9	10·0	9·9	10·0	9·9	8 36	11·8	12 40	7·2
18	10·1	9·9	9·9	10·0	11·0	11·0	8·7	8·1	9·9	10·5	9·9	9·9	9·9	9 15	11·8	13 0	7·7
19	10·0	9·9	9·7	9·8	11·8	11·7	8·7	7·8	9·9	10·3	9·9	9·9	9·9	8 30	12·2	13 12	7·6
20	10·0	9·8	9·7	9·8	11·3	11·0	7·4	8·1	11·1	10·7	10·0	9·7	9·9	8 44	12·0	12 30	6·9
21	9·9	9·3	9·5	9·9	11·4	10·3	7·1	7·3	9·5	10·5	10·3	10·3	**9·6**	8 30	11·9	12 20	**6·6**
22	10·6	10·3	9·9	9·9	11·4	11·5	9·4	9·0	9·8	10·5	10·2	10·2	10·2	8 44	12·2	13 40	8·9
†23	10·1	9·8	9·6	9·8	10·8	11·1	8·9	8·0	9·8	10·2	9·8	9·9	9·8	8 20	11·2	13 4	7·7
24	9·9	9·8	9·6	9·6	10·8	10·3	7·5	7·8	10·4	9·6	9·6	11·0	9·8	8 20	11·2	12 20	6·9
25	12·4	12·8	12·0	12·4	11·3	10·6	9·5	9·2	10·4	10·8	10·5	10·6	**10·8**	2 4	**13·3**	13 40	9·0
26	11·3	10·8	10·2	9·9	11·1	11·2	9·2	9·7	10·8	10·7	10·2	10·3	10·5	0 40	11·4	12 10	8·5
27	10·5	10·7	10·0	10·0	11·4	10·8	8·9	9·1	10·7	10·3	10·3	10·6	10·3	8 40	12·0	13 0	8·4
28	10·4	10·5	10·3	10·3	10·9	10·4	8·5	9·2	10·5	10·3	10·0	10·2	10·1	8 48	11·3	12 30	8·2
29	10·4	10·3	10·0	10·3	12·5	11·6	8·9	8·8	10·0	10·1	10·0	10·3	10·3	8 12	12·6	12 40	7·9
30	10·3	10·5	10·3	10·5	11·5	11·8	9·8	10·3	11·2	9·8	10·0	10·3	10·5	9 32	12·1	12 30	9·2
31	10·4	10·7	10·7	10·4	10·6	10·1	8·2	8·6	9·9	10·2	9·9	10·3	10·0	8 32	10·8	12 30	7·5
Mean .	10·2	10·1	10·0	10·0	11·1	10·9	8·8	8·9	10·4	10·1	9·9	10·0	10·0				
Mean† .	9·8	9·7	9·6	9·7	10·6	10·9	9·2	9·0	10·2	9·8	9·6	9·7	9·8				

APRIL. 0° PLUS TABULAR QUANTITIES.

1	10·3	10·4	10·3	10·5	11·3	10·4	8·0	8·7	10·3	9·8	9·8	10·1	10·0	8 4	11·6	12 20	7·7
†2	10·3	10·3	10·1	9·8	10·3	10·4	7·3	7·9	9·9	10·2	9·8	9·9	9·7	9 12	10·9	12 20	7·2
3	10·1	10·3	10·3	10·0	11·4	11·5	8·4	8·7	9·8	9·8	9·7	10·0	10·0	9 30	12·1	12 20	8·2
4	10·1	10·0	9·8	10·0	11·4	11·3	8·2	8·1	9·4	9·9	9·7	9·8	9·8	9 4	11·5	12 40	7·8
†5	9·9	10·0	9·9	10·1	11·8	11·1	8·4	8·4	9·1	9·7	9·5	9·7	9·8	8 20	12·2	12 20	7·9
6	9·9	10·1	10·0	10·0	11·6	12·3	10·1	9·7	10·7	10·3	9·6	9·7	**10·3**	9 0	12·6	19 20	9·4
7	9·9	9·9	9·8	10·1	11·5	12·2	9·1	8·3	9·3	10·1	9·9	10·1	10·0	9 44	12·5	13 8	7·9
8	10·3	10·3	10·1	10·5	11·4	11·0	9·5	9·2	10·9	10·1	9·3	9·6	10·2	7 20	11·5	13 0	8·9
9	9·9	10·0	9·9	10·4	11·2	10·1	7·4	6·5	8·5	9·7	9·4	9·7	**9·4**	7 30	11·3	13 20	**6·4**
10	10·0	9·7	9·9	10·6	11·9	11·2	7·8	7·7	9·4	9·2	9·5	9·5	9·7	8 30	12·2	12 48	6·9
11	9·9	10·2	10·1	9·4	11·2	10·3	7·7	8·7	10·1	9·8	9·4	9·6	9·7	8 30	11·4	12 30	7·5
12	10·1	10·3	10·0	10·3	11·8	11·4	8·8	7·9	9·3	9·9	9·9	10·1	10·0	7 30	12·0	13 10	7·6
13	10·3	10·4	10·2	10·2	11·4	11·5	8·3	8·2	10·5	10·1	10·1	10·1	10·1	8 40	12·0	12 44	8·0
14	10·3	10·2	9·8	9·4	12·4	11·1	8·1	8·4	10·2	10·1	10·0	9·9	10·0	8 10	12·6	12 40	7·6
15	9·9	10·1	9·9	9·9	11·6	11·4	10·0	9·4	9·6	10·1	9·9	9·7	10·1	8 40	12·4	13 10	9·1
16	10·0	10·1	10·0	9·7	11·5	11·6	9·5	8·7	9·8	10·1	9·5	9·5	10·0	8 30	11·8	13 10	8·5
†17	9·7	9·9	9·9	9·6	10·3	11·1	8·8	8·3	9·7	9·9	9·5	9·7	9·7	9 20	11·5	12 30	8·1
18	9·8	9·9	9·8	9·7	11·6	11·2	8·6	8·0	9·4	10·0	9·4	9·8	9·8	8 20	11·9	13 4	7·7
19	9·9	9·8	9·7	9·8	10·9	10·5	8·8	9·1	10·3	10·1	9·7	9·7	9·9	8 20	11·1	12 30	8·3
20	9·8	9·9	9·8	10·0	11·5	11·1	7·5	7·5	9·1	9·6	9·4	9·7	9·6	8 10	11·6	12 30	6·8
21	10·8	10·7	10·5	10·0	11·9	11·6	8·5	8·2	8·9	9·7	10·1	10·0	10·0	8 56	12·7	12 40	7·6
22	10·2	10·2	10·5	10·2	11·6	11·7	7·9	7·2	8·8	10·0	9·3	10·2	9·8	9 4	12·3	13 4	7·1
23	10·1	10·3	10·5	10·3	12·2	11·9	9·3	8·4	9·4	9·6	9·5	9·8	10·2	8 44	**13·0**	13 10	8·3
24	10·1	10·3	10·1	10·4	11·6	11·9	9·3	9·1	10·4	9·7	9·4	9·7	10·2	9 4	12·3	12 20	8·7
25	9·9	10·0	10·2	10·2	10·3	9·6	8·7	8·9	9·6	9·7	9·6	9·8	9·7	6 30	10·4	11·40	8·3
†26	10·0	10·0	10·0	10·6	11·0	9·2	8·0	8·7	9·4	9·7	9·4	9·6	9·6	7 10	11·3	11 20	7·7
†27	9·7	9·8	9·9	10·3	11·3	10·4	8·7	8·5	9·3	9·7	9·4	9·6	9·7	7 30	11·4	12 40	8·2
28	9·8	9·9	9·9	9·7	11·4	9·7	7·7	8·1	9·6	9·7	9·3	9·7	9·5	8 4	11·5	12 16	7·5
29	9·8	9·9	9·9	10·8	11·1	9·8	7·7	7·9	8·8	9·3	9·2	9·7	9·5	8 4	11·3	12 30	7·2
30	9·7	9·8	9·7	9·6	10·8	9·9	8·0	8·6	9·3	9·2	9·2	9·3	9·4	7 30	11·2	12 40	7·7
Mean .	10·0	10·1	10·0	10·1	11·4	10·9	8·5	8·4	9·6	9·8	9·6	9·8	9·9				
Mean† .	9·9	10·0	10·0	10·1	10·9	10·4	8·2	8·4	9·5	9·8	9·5	9·7	9·7				

*See footnote on page 49.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

MAY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
†1	9·6	9·8	9·8	10·3	11·3	10·0	8·1	8·9	9·9	9·5	8·9	9·3	9·6	7 50	11·4	12 30	7·7
2	9·6	9·7	9·8	10·3	11·4	10·1	8·3	8·1	9·2	9·4	9·3	9·3	9·5	7 10	11·4	12 16	7·9
3	9·5	9·6	9·6	10·0	10·8	8·1	6·5	7·5	9·1	9·3	8·9	9·1	9·0	7 20	11·1	11 48	6·2
4	9·8	10·3	10·6	10·3	10·9	9·6	7·7	8·4	8·7	9·0	8·9	9·3	9·5	3 48	11·3	12 32	7·4
5	9·6	9·9	10·1	9·5	10·7	9·5	7·7	8·1	9·6	10·1	9·3	9·5	9·5	7 50	10·9	11 51	7·7
6	9·9	9·9	9·6	9·7	11·7	10·7	9·0	9·0	9·5	9·9	9·1	9·3	**9·8**	8 10	12·2	11 40	8·9
7	9·6	9·7	9·8	9·5	10·1	9·1	8·0	8·1	9·0	9·6	9·0	9·0	9·2	8 4	10·2	12 4	7·9
8	10·0	10·2	10·3	10·5	11·3	9·4	7·5	8·3	9·5	9·9	8·9	9·2	9·6	7 4	11·4	12 4	7·4
9	9·7	9·8	9·9	10·6	10·6	8·9	7·7	8·5	10·2	9·9	9·2	9·2	9·5	7 4	11·3	11 40	7·3
10	9·4	9·6	9·6	10·5	11·5	9·5	9·0	9·8	10·3	9·9	9·2	9·1	9·8	7 40	11·5	10 50	8·8
11	9·3	9·5	9·6	10·2	10·5	9·1	8·5	9·3	10·1	9·5	9·1	9·1	9·5	7 14	10·7	10 36	8·0
†12	9·2	9·2	9·1	9·7	10·0	8·2	6·9	8·0	9·2	9·5	9·3	9·3	**8·9**	8 4	10·3	11 32	6·9
†13	9·2	9·3	9·3	9·9	11·1	9·1	6·5	7·2	9·2	9·3	9·1	9·1	9·0	7 10	11·3	12 8	6·2
14	9·3	9·4	9·3	10·2	10·9	8·3	6·7	7·0	8·9	9·5	9·2	9·2	9·0	7 20	11·2	12 20	6·4
15	9·5	9·5	9·5	10·4	11·6	9·9	7·4	8·0	9·2	9·5	9·0	9·2	9·4	8 4	11·7	11 46	7·2
16	9·4	9·5	9·6	10·3	10·8	8·5	7·7	8·5	9·6	9·4	9·0	9·2	9·3	7 10	11·1	11 20	7·5
17	9·3	9·4	9·6	10·9	11·9	9·4	6·5	6·7	8·2	9·0	9·4	10·2	9·2	7 0	12·3	12 30	**6·1**
18	10·4	10·2	10·1	11·6	12·4	10·4	7·7	7·3	8·6	9·3	9·2	9·3	9·6	6 40	**13·0**	12 58	6·4
19	9·7	10·1	9·9	11·0	11·2	9·6	6·7	6·8	8·4	9·3	9·1	9·4	9·3	6 20	11·4	12 44	6·1
20	9·7	9·7	9·8	10·1	12·1	10·9	8·3	8·1	8·7	9·3	8·8	9·4	9·6	8 20	12·3	12 48	8·1
21	9·9	10·0	9·8	10·3	11·9	10·5	7·6	7·5	8·7	9·0	9·5	9·5	9·5	7 40	12·0	12 16	7·1
†22	9·7	9·7	9·8	10·2	11·0	9·4	6·8	7·4	8·8	9·9	9·2	9·4	9·3	8 14	11·2	12 20	6·6
23	9·5	9·5	9·5	10·7	10·9	8·2	7·1	7·5	9·2	9·5	9·2	9·4	9·2	6 48	11·3	11 10	6·9
†24	9·6	9·6	9·6	10·7	11·8	10·3	7·6	7·9	9·2	9·1	8·9	9·1	9·4	7 40	12·0	12 18	7·2
25	9·4	9·4	9·5	10·6	11·0	8·7	7·1	7·7	8·3	8·5	8·6	9·0	9·0	7 24	11·3	11 30	7·0
26	9·1	9·3	9·5	10·5	10·4	9·4	8·1	7·6	8·6	9·8	9·2	9·2	9·2	7 4	10·7	13 12	7·3
27	9·5	9·5	9·5	10·7	11·7	8·1	6·4	7·2	8·9	9·0	8·7	9·2	9·0	7 40	11·9	12 14	6·1
28	9·2	9·6	9·7	10·7	11·4	8·9	6·8	6·8	8·7	9·3	9·2	9·3	9·1	7 20	11·5	12 30	6·3
29	9·2	9·5	9·4	10·4	12·3	9·8	7·3	7·9	8·0	8·8	8·8	9·0	9·3	7 26	12·4	11 50	7·2
30	10·2	10·3	10·2	10·4	12·0	11·2	8·4	7·8	7·9	9·1	9·6	9·4	9·7	7 20	12·0	13 40	7·3
31	10·1	9·4	9·4	10·8	12·1	10·1	8·4	8·6	9·2	9·4	9·2	9·4	9·3	7 58	12·2	12 4	8·2
Mean .	9·6	9·7	9·7	10·4	11·3	9·5	7·5	7·9	9·0	9·4	9·1	9·3	9·4				
Mean† .	9·5	9·5	9·5	10·1	11·0	9·4	7·2	7·8	9·3	9·4	9·1	9·2	9·3				

JUNE. 0° PLUS TABULAR QUANTITIES.

1	9·5	9·8	9·6	10·5	11·7	9·5	7·5	7·7	8·5	8·7	9·0	9·1	9·3	7 30	11·9	12 40	7·2
2	9·5	9·8	9·6	10·0	11·6	10·5	7·1	6·7	7·3	8·8	9·0	9·3	9·1	8 20	11·9	12 44	6·2
3	9·4	9·6	9·5	10·3	11·6	10·5	9·0	8·2	9·0	9·7	8·9	9·4	**9·6**	8 24	11·8	13 40	8·2
4	9·5	9·7	9·8	10·3	11·7	10·5	7·7	7·8	8·7	9·0	8·8	9·0	9·3	8 8	11·8	12 20	7·3
5	9·3	9·3	9·7	10·1	12·0	10·6	7·3	7·2	9·1	9·5	9·0	9·3	9·3	7 30	12·2	12 36	6·3
6	9·4	9·5	9·5	10·0	11·6	9·0	7·0	7·6	7·7	8·8	8·9	9·5	9·0	7 36	11·7	12 4	6·7
7	9·5	9·7	9·8	10·2	11·8	9·6	8·4	7·8	8·5	9·5	9·4	9·2	9·4	7 40	11·9	11 28	7·3
8	9·3	9·5	9·4	10·0	10·3	9·3	7·7	7·7	8·6	9·2	8·9	9·3	9·1	7 30	10·5	11 20	7·3
†9	9·7	9·6	9·5	10·1	11·3	9·4	6·4	7·8	8·7	9·4	9·0	9·3	9·1	7 30	11·5	12 30	6·3
†10	9·4	9·5	9·3	9·3	9·8	8·9	7·4	7·3	8·4	9·1	8·9	9·1	8·8	8 30	10·4	12 40	7·1
11	9·1	9·4	9·4	10·4	11·4	9·1	6·7	6·5	8·2	9·0	8·7	8·9	8·9	6 40	11·6	12 48	6·0
12	9·1	9·2	9·4	10·5	11·2	9·3	7·2	8·2	9·8	8·7	8·3	8·6	9·1	6 48	11·6	12 40	6·9
13	9·0	9·3	9·7	11·7	12·9	9·7	6·7	6·1	7·5	8·0	8·8	9·5	9·1	7 24	13·0	13 12	5·6
14	9·7	10·0	10·5	11·5	12·0	9·4	7·1	7·3	8·2	8·7	9·0	9·3	9·4	7 36	12·4	12 4	6·9
15	9·9	10·1	9·7	10·2	11·3	10·0	7·3	7·8	8·5	9·3	8·9	9·0	9·3	8 30	11·6	12 20	6·9
16	9·3	9·8	9·8	10·7	12·0	10·4	8·0	6·6	7·9	9·4	8·9	9·2	9·3	7 40	12·2	13 20	6·4
†17	9·5	9·7	9·6	10·3	11·6	10·5	7·3	6·5	8·3	9·3	8·9	9·2	9·2	7 44	11·6	13 24	6·3
†18	9·4	9·4	9·3	9·7	12·3	10·3	6·6	5·9	7·9	9·3	8·6	9·1	9·0	8 20	12·6	13 4	5·7
19	9·4	9·5	9·5	10·0	11·8	10·7	7·1	7·3	8·4	8·8	8·5	8·8	9·1	8 10	11·9	12 40	6·5
20	9·2	9·5	9·7	10·0	10·8	9·9	6·7	6·9	8·6	8·7	8·9	9·0	9·0	8 40	11·4	12 24	6·3
21	9·4	9·8	10·3	10·8	11·5	8·2	7·0	6·9	8·4	8·9	8·7	8·8	9·0	7 30	11·7	12 48	6·2
22	8·9	9·4	9·4	9·9	10·3	8·1	7·1	7·4	8·6	9·1	8·7	8·9	8·8	6 30	10·7	12 20	6·5
23	9·2	9·2	9·2	10·1	11·3	9·1	7·1	8·2	9·0	9·3	8·7	8·7	9·1	7 48	11·4	12 40	6·9
†24	9·2	9·2	9·3	9·9	10·8	9·9	7·5	7·5	8·9	8·9	8·8	8·9	9·1	8 4	10·9	12 44	7·3
25	9·0	9·1	9·2	10·0	10·7	10·3	8·1	8·4	9·3	8·9	8·7	8·7	9·2	7 24	10·8	11 20	7·8
26	8·8	9·0	9·2	10·5	11·1	8·1	6·7	7·2	7·9	8·8	8·5	8·9	**8·7**	7 10	11·6	11 30	6·5
27	9·3	9·3	9·4	10·7	10·9	9·7	6·6	6·6	8·0	8·8	8·3	8·9	8·9	6 30	11·2	12 50	6·1
28	9·5	9·7	9·9	11·4	12·8	9·4	6·4	7·2	8·2	8·4	8·4	9·2	9·2	7 40	**13·1**	11 40	6·4
29	9·4	9·5	9·5	10·8	10·7	7·7	6·0	6·4	8·6	9·2	8·6	9·2	8·8	7 4	11·5	12 30	5·9
30	9·5	9·4	9·6	10·3	10·7	7·8	5·2	5·9	7·5	8·8	9·4	10·5	8·7	6 50	10·9	12 20	**4·9**
Mean .	9·3	9·5	9·6	10·3	11·4	9·5	7·1	7·2	8·4	9·0	8·8	9·1	9·1				
Mean† .	9·4	9·5	9·4	9·9	11·1	9·8	7·1	7·0	8·5	9·2	8·8	9·1	9·1				

*See footnote on page 49.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

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JULY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	10·0	9·5	9·9	11·1	11·3	8·5	5·2	6·5	8·9	9·1	8·8	8·9	8·9	6 44	11·7	12 4	**5·2**
2	9·1	9·3	9·4	10·2	11·1	8·9	7·4	8·1	9·1	9·3	8·9	8·6	9·2	7 40	11·3	12 4	7·3
3	9·6	9·5	9·3	10·0	11·0	9·8	8·2	7·8	9·7	9·5	8·7	8·7	**9·3**	7 34	11·2	12 30	7·3
4	9·1	9·2	9·3	10·3	9·3	8·3	7·9	8·1	8·4	9·0	8·7	9·0	8·9	6 4	10·6	13 8	7·5
†5	9·4	9·4	9·3	9·7	9·6	9·3	8·2	7·6	8·7	9·4	8·6	8·8	8·9	6 30	9·9	13 8	7·5
6	8·8	9·1	9·1	10·0	10·6	9·5	7·8	6·4	7·3	8·2	8·4	8·3	8·6	7 40	10·8	13 20	6·3
7	9·1	9·4	9·7	9·9	10·6	10·5	9·2	8·1	7·3	8·2	8·7	8·6	9·1	8 4	10·8	14 40	7·0
8	8·9	9·4	9·5	9·8	10·6	9·9	7·7	7·8	9·0	8·8	8·5	8·8	9·0	8 4	10·7	12 8	7·5
9	9·3	9·6	9·4	10·2	10·8	9·5	7·6	6·9	8·6	8·9	8·4	8·5	8·9	8 4	10·9	13 30	6·7
10	8·9	9·3	9·7	10·4	10·6	10·1	8·8	8·3	7·6	8·1	8·2	8·6	9·1	7 10	10·9	17 20	7·2
11	9·5	10·1	10·1	10·9	11·1	8·8	6·9	7·4	8·8	9·7	8·5	8·8	9·3	7 4	**11·9**	13 8	6·6
12	9·7	9·7	9·6	10·3	10·7	8·5	7·0	6·7	7·8	8·7	8·9	8·9	8·8	7 20	10·9	13 40	6·6
13	9·0	9·6	9·7	10·5	11·0	8·7	7·7	7·9	8·7	9·3	8·7	8·9	9·1	7 16	11·1	11 40	7·5
†14	9·3	9·4	9·7	10·3	10·1	8·9	7·8	7·4	8·0	9·1	8·5	8·7	8·9	5 40	10·5	14 24	7·1
†15	9·0	9·3	9·6	10·5	10·6	10·3	7·1	7·2	8·6	9·1	8·6	8·6	9·1	6 40	11·0	12 16	6·8
16	9·2	9·6	9·6	10·2	9·0	6·8	5·5	7·3	8·1	8·8	8·5	8·9	**8·5**	6 30	10·4	11 44	5·5
17	9·3	9·4	9·5	9·6	9·6	8·9	7·8	8·3	8·4	8·3	8·5	8·7	8·9	7 20	9·7	11 30	7·7
18	9·3	9·9	10·2	9·9	9·7	8·8	7·6	6·8	7·0	8·3	7·4	8·8	8·6	6 30	10·3	14 30	6·2
19	9·2	9·2	9·6	9·9	10·3	9·8	8·5	7·5	7·9	8·9	8·8	8·8	9·0	7 16	10·5	14 44	7·1
20	9·1	9·3	9·2	9·5	10·8	9·9	7·5	7·0	8·3	8·5	8·6	8·7	8·8	8 10	11·1	12 40	6·6
†21	9·0	9·1	9·1	9·3	10·5	10·5	7·5	6·6	7·5	8·9	8·8	8·9	8·8	9 10	11·1	14 0	6·5
22	9·0	9·2	9·2	9·9	10·7	9·6	6·2	6·8	7·9	8·6	8·4	8·5	8·7	8 20	11·0	12 30	5·9
23	8·9	9·2	9·5	10·0	10·7	10·2	7·9	7·5	8·2	8·8	9·1	9·1	9·1	9 4	11·2	14 20	7·4
†24	9·3	9·6	9·6	10·3	10·8	9·5	9·0	8·5	8·7	8·6	8·5	8·7	9·3	7 24	11·1	13 30	8·0
25	9·1	9·1	9·3	10·1	10·4	9·7	7·8	7·5	9·1	8·9	8·5	8·6	9·0	7 40	10·5	13 40	7·1
26	9·0	9·1	9·5	9·9	9·7	7·6	6·7	7·5	9·2	9·0	8·5	8·9	8·6	7 40	10·3	12 20	6·5
27	9·1	9·3	9·5	10·9	10·4	8·4	8·0	8·5	8·2	8·6	8·3	8·3	8·9	6 40	11·1	12 30	8·0
28	8·8	9·0	8·9	9·6	9·3	10·0	9·2	8·0	9·1	9·7	8·4	8·6	9·1	7 40	10·4	13 40	7·7
29	8·9	9·1	9·1	10·2	11·5	9·7	7·3	7·5	8·1	9·7	8·4	8·4	9·0	7 30	11·5	12 20	7·2
30	8·4	8·7	9·1	10·3	11·2	9·0	7·1	7·3	9·1	9·7	8·3	8·2	8·9	7 30	11·4	13 30	6·7
31	8·6	8·9	8·9	10·1	10·2	8·4	7·6	7·1	8·9	9·2	8·3	8·4	8·7	7 20	10·6	12 44	6·6
Mean .	9·1	9·3	9·4	10·1	10·4	9·2	7·6	7·5	8·4	8·9	8·5	8·7	8·9				
Mean† .	9·2	9·4	9·5	10·0	10·3	9·7	7·9	7·5	8·3	9·0	8·6	8·7	9·0				

AUGUST. 0° PLUS TABULAR QUANTITIES.

†1	8·7	8·8	8·8	9·5	10·6	9·5	7·1	6·2	8·2	9·8	8·4	8·7	8·7	8 4	10·7	13 44	6·1
2	9·0	8·9	9·1	9·9	10·4	8·8	6·5	6·2	7·2	8·7	8·6	8·5	8·5	7 24	10·7	13 30	6·0
3	8·7	9·3	9·2	9·6	10·7	9·5	6·9	6·9	9·5	9·2	8·4	8·4	8·8	7 30	11·1	13 8	6·1
4	9·3	9·5	9·4	10·3	10·3	7·7	7·9	8·3	8·2	8·3	8·5	8·4	8·8	7 8	10·7	10 30	7·3
5	8·9	9·0	9·2	10·1	10·5	8·7	8·1	8·4	9·5	9·4	8·5	8·5	9·1	7 16	11·1	12 30	7·5
6	8·6	9·0	9·1	10·3	9·8	8·5	8·0	8·5	9·4	9·0	8·6	8·9	9·0	6 20	10·7	13 16	7·6
7	9·0	9·4	9·7	11·0	11·3	8·8	6·5	7·0	8·7	8·7	8·4	8·8	8·9	6 24	11·7	12 40	5·9
8	9·2	9·3	9·3	10·1	10·1	7·3	6·6	7·8	8·8	8·4	8·6	8·6	8·7	7 20	10·7	11 4	6·4
9	9·1	9·2	9·3	10·3	11·7	9·5	7·4	8·9	9·3	9·5	9·0	8·7	**9·3**	7 24	11·8	11 28	7·2
10	8·9	9·1	9·5	9·9	11·3	8·6	6·8	7·5	9·1	8·8	8·3	8·7	8·9	7 8	11·4	12 4	6·7
11	8·8	8·9	9·1	10·0	10·6	7·7	6·0	7·3	9·4	9·1	8·5	8·8	8·7	7 20	11·0	12 20	5·7
12	8·9	9·2	9·2	9·2	10·3	9·6	7·1	6·3	8·0	9·8	8·7	8·7	8·7	8 30	10·4	14 16	6·1
13	8·9	8·9	9·5	10·1	10·7	8·9	7·1	7·0	7·4	8·5	8·1	8·2	8·6	7 30	11·0	13 20	6·6
14	8·5	9·6	9·2	9·9	11·6	9·2	6·8	7·5	8·4	9·3	8·9	8·7	9·0	8 4	11·8	12 20	6·7
15	8·8	9·1	9·1	9·1	9·8	7·8	7·2	8·1	9·1	9·6	8·8	9·2	8·8	7 30	9·9	11 10	6·7
16	9·2	8·9	9·1	9·8	10·7	9·1	8·2	9·1	9·6	8·9	8·0	8·1	9·1	7 20	10·8	11 40	8·0
17	8·7	9·2	9·6	10·4	10·8	8·7	8·3	8·3	8·4	9·2	8·7	8·7	9·1	7 36	11·2	13 4	8·0
†18	8·8	8·8	8·9	9·6	10·4	8·5	7·6	7·6	8·7	9·2	8·5	8·5	8·7	7 40	10·6	11 10	7·4
19	8·6	8·7	9·1	9·6	10·3	8·5	7·5	6·9	7·8	8·5	8·3	8·3	8·5	7 54	10·5	13 30	6·7
20	8·7	9·0	9·1	9·2	10·2	9·2	8·1	7·5	7·4	8·6	8·5	8·6	8·7	8 10	10·4	14 44	7·2
†21	8·9	9·2	9·2	9·6	9·4	8·0	7·1	9·1	9·4	9·0	8·4	8·6	8·8	6 30	9·9	11 10	6·7
22	8·8	9·0	9·2	10·1	10·8	8·7	7·3	7·6	9·2	8·9	8·5	8·5	8·9	7 30	10·9	11 44	7·2
23	8·7	8·7	8·7	9·9	10·2	7·8	5·9	7·8	9·2	8·6	8·3	8·3	8·5	7 4	10·7	11 48	5·6
24	8·6	8·7	8·6	9·7	10·5	7·7	6·5	6·9	10·1	9·2	7·8	8·1	8·5	7 40	10·8	12 30	6·0
25	8·6	8·7	8·8	10·1	11·6	7·6	5·5	7·5	9·4	8·0	7·6	8·0	8·5	7 20	**11·9**	11 40	5·4
26	8·6	9·1	9·2	9·9	10·2	8·0	6·1	6·4	8·5	8·5	7·7	8·3	8·4	7 4	10·8	12 34	5·9
27	8·5	8·6	8·8	9·9	11·2	8·6	7·0	7·7	8·8	8·7	7·9	8·3	8·7	7 40	11·6	12 44	6·8
†28	8·7	8·8	9·0	10·1	11·5	8·7	5·9	6·6	8·4	8·2	8·1	8·4	8·5	7 40	11·7	12 30	5·4
†29	8·5	8·6	8·6	9·6	10·8	8·3	5·2	5·7	7·7	8·5	8·3	8·3	8·2	7 24	11·0	12 40	**4·9**
30	8·4	8·5	8·5	8·9	10·4	8·6	5·8	6·9	8·5	8·4	7·7	7·9	8·2	7 40	10·6	12 20	5·6
31	8·2	8·3	8·3	8·7	10·5	8·9	6·4	6·1	7·9	8·3	8·1	8·1	**8·1**	8 40	10·6	12 56	5·6
Mean .	8·8	9·0	9·1	9·8	10·6	8·6	6·9	7·4	8·7	8·9	8·3	8·5	8·7				
Mean† .	8·7	8·9	8·9	9·7	10·5	8·6	6·6	7·1	8·5	8·9	8·3	8·5	8·6				

*See footnote on page 49.
†Five international quiet days.
‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	8·3	8·4	8·5	9·3	10·6	8·3	6·8	6·3	8·5	8·7	8·1	8·4	8·3	7 30	10·6	13 20	6·0
2	8·4	8·4	8·4	9·3	10·7	7·4	5·2	6·8	8·0	8·3	7·7	7·9	8·0	7 44	10·9	11 40	5·0
3	8·2	8·4	8·4	9·0	10·3	7·3	5·3	6·4	8·0	8·3	7·8	8·0	7·9	7 40	10·5	11 36	5·2
4	8·0	8·9	8·6	9·4	10·3	7·7	5·6	6·9	8·7	8·5	8·3	8·4	8·3	7 36	10·5	11 30	5·4
5	8·5	8·6	8·8	9·2	9·8	7·9	6·7	7·3	8·8	8·3	8·2	8·3	**8·4**	7 10	10·2	11 40	6·4
6	8·5	8·5	8·7	9·0	9·1	6·8	6·0	7·0	8·4	8·2	8·1	8·3	8·1	7 4	9·6	11 40	5·8
†7	8·3	8·5	8·7	9·3	10·6	8·4	6·4	6·3	8·3	8·1	8·0	8·3	8·3	7 40	10·7	12 24	5·7
†8	8·4	8·4	8·3	9·0	10·4	8·4	6·1	6·2	8·2	7·9	7·8	8·0	8·1	7 30	10·5	12 30	5·3
9	8·3	8·3	8·3	9·1	9·7	7·1	5·3	6·7	8·5	8·4	8·0	8·1	8·0	7 10	10·1	12 20	5·1
10	8·4	8·4	8·5	9·7	10·5	8·9	5·7	6·4	8·6	8·4	8·2	8·0	8·3	7 16	11·1	12 30	5·1
11	8·3	8·2	8·4	9·3	10·1	7·4	5·5	6·1	8·5	8·7	7·8	8·0	8·0	7 30	10·5	11 56	5·3
12	8·1	8·2	8·5	9·4	10·2	8·1	4·8	6·3	8·3	8·6	8·1	8·2	8·1	7 8	10·4	11 56	4·6
13	8·1	8·2	8·4	8·8	11·3	9·8	7·2	6·3	7·2	8·9	8·0	7·9	8·3	8 10	**11·4**	13 10	6·0
14	8·3	8·5	8·3	8·1	10·9	8·2	5·9	5·9	7·9	8·5	8·3	8·5	8·1	7 44	11·1	12 40	5·2
15	8·5	8·4	8·5	8·6	9·5	7·8	5·6	5·9	7·8	8·0	7·6	8·1	7·9	8 40	9·6	12 16	5·4
†16	8·2	8·3	8·3	8·9	10·0	7·5	5·7	5·9	8·3	8·4	8·1	8·1	8·0	7 20	10·1	12 56	5·4
17	8·3	8·4	8·3	8·6	10·1	9·1	6·4	6·5	8·8	8·6	8·3	8·4	8·3	8 4	10·3	11 24	5·7
18	8·4	8·8	8·4	8·3	9·9	8·9	7·4	7·0	7·9	8·3	8·0	8·0	8·3	8 10	10·0	12 48	6·8
19	8·3	8·3	8·2	8·5	10·5	9·4	7·3	7·5	8·3	8·3	8·0	7·9	8·3	8 10	10·7	12 30	6·7
20	7·9	8·1	8·2	8·3	9·3	7·5	5·8	6·8	8·4	7·9	7·9	7·9	7·9	7 40	9·6	11 48	5·7
†21	8·0	8·1	8·2	8·5	8·6	6·6	5·7	6·5	8·2	7·5	7·5	7·7	7·6	6 48	8·8	11 24	5·4
†22	7·9	7·9	7·8	8·2	9·6	7·5	5·1	6·6	8·5	7·4	7·4	7·7	7·7	8 10	9·8	12 20	5·0
23	7·8	7·8	7·8	8·3	9·9	8·1	4·7	6·1	8·6	7·7	7·3	7·9	7·7	7 56	10·0	12 4	4·7
24	7·9	7·8	8·1	8·4	8·0	4·7	3·8	5·3	7·8	7·7	7·5	7·7	**7·1**	6 20	8·7	12 10	**3·6**
25	8·0	8·3	8·2	8·2	9·4	8·2	6·6	6·7	8·5	7·7	7·4	7·6	7·9	7 30	9·7	13 4	6·0
26	7·6	7·6	7·7	7·6	8·8	7·3	5·1	5·1	7·7	8·7	7·2	7·6	7·3	7 20	8·9	13 20	4·3
27	8·2	8·6	8·8	8·5	9·7	8·5	5·6	5·9	9·0	8·5	8·7	9·5	8·4	22 24	11·4	12 12	4·7
28	9·9	9·3	7·7	8·4	8·7	7·6	5·3	6·6	8·5	8·6	8·1	8·2	8·0	0 20	9·9	11 56	5·2
29	8·2	8·4	8·1	8·4	9·4	8·0	6·5	7·4	8·3	7·7	7·6	7·7	8·0	7 20	9·6	11 30	6·5
30	7·9	8·0	8·1	8·1	9·1	7·6	6·0	6·9	7·4	7·9	7·5	7·5	7·7	7 44	9·3	12 20	5·9
Mean .	8·2	8·3	8·3	8·7	9·8	7·9	5·8	6·5	8·3	8·2	7·9	8·1	8·0				
Mean† .	8·1	8·3	8·3	8·7	9·8	7·7	5·8	6·3	8·3	7·9	7·8	8·0	7·9				

OCTOBER. 0° PLUS TABULAR QUANTITIES.

1	8·0	8·1	7·9	8·1	8·7	7·8	6·1	7·3	8·0	8·1	7·6	7·6	7·8	6 56	9·2	11 44	6·0
†2	7·7	7·7	7·9	7·9	9·5	6·9	5·5	6·5	7·9	7·7	7·4	7·7	7·5	7 32	9·7	11 56	5·4
†3	7·6	7·6	7·6	7·6	10·1	9·3	6·6	6·1	8·1	8·0	7·7	7·6	7·8	8 30	**10·8**	13 8	5·8
4	7·5	7·5	7·6	8·0	9·0	8·7	6·6	6·7	8·3	7·8	7·6	7·5	7·8	8 20	9·3	12 56	6·2
5	7·6	7·7	7·6	7·5	7·8	7·3	5·9	6·4	7·7	7·5	7·4	7·5	7·4	7 40	8·0	12 24	5·7
6	7·7	7·8	7·6	7·6	8·3	7·4	6·5	8·0	8·0	7·3	7·3	7·8	7·6	7 30	8·5	11 30	6·3
7	7·7	7·6	7·5	7·4	8·6	7·7	6·3	7·4	8·5	7·7	7·6	7·7	7·6	8 8	8·8	12 20	6·1
8	7·6	7·6	7·6	7·4	8·1	8·3	6·1	6·2	8·3	7·6	7·6	7·5	7·5	8 26	8·6	12 40	5·6
9	7·7	7·7	7·5	7·5	8·7	8·1	6·5	6·6	8·1	7·6	7·3	7·5	7·6	8 40	9·1	12 40	6·2
10	7·5	7·5	7·5	7·3	8·3	8·2	3·8	5·8	8·2	7·3	6·9	7·9	**7·2**	7 56	8·5	12 8	**3·7**
11	7·9	8·4	7·8	7·7	8·6	8·6	6·3	7·4	8·8	8·2	7·8	7·6	7·9	16 44	9·1	11 30	6·1
12	7·8	8·0	7·8	7·6	8·4	8·1	6·3	6·9	8·0	7·5	7·3	7·5	7·6	7 30	8·9	12 40	5·3
13	7·9	8·3	7·9	7·6	8·2	6·9	5·8	6·7	7·9	7·5	7·5	7·5	7·5	1 40	8·5	12 4	5·5
14	7·8	7·8	7·7	7·6	8·8	7·7	7·0	7·3	7·9	7·6	7·4	7·5	7·7	7 30	9·1	12 40	6·8
15	7·7	7·5	7·4	7·4	8·4	8·6	7·7	8·3	8·3	8·6	8·6	8·3	8·1	22 44	10·6	12 28	6·7
16	8·5	8·5	6·8	7·7	9·1	9·2	7·4	7·4	7·7	9·5	9·6	9·5	**8·5**	22 48	10·6	4 56	6·3
17	9·1	7·9	7·8	7·1	10·1	8·9	6·8	7·4	8·4	8·1	8·3	8·3	8·2	8 40	10·2	5 16	6·4
18	8·1	7·9	7·3	7·9	8·7	7·3	5·6	7·1	9·0	7·6	7·8	7·9	7·8	15 20	9·4	12 20	5·3
19	8·1	6·8	8·1	8·3	8·8	6·5	6·0	7·1	7·5	7·4	7·7	7·8	7·6	7 30	9·2	1 24	5·7
20	8·0	8·3	7·9	8·2	9·0	7·1	6·5	7·5	7·4	7·6	7·7	7·9	7·8	7 28	9·4	11 40	6·3
21	7·9	7·9	7·9	7·5	8·2	7·6	7·3	7·4	7·6	7·5	7·7	7·8	7·7	7 24	8·4	11 40	7·1
22	7·9	7·9	7·9	7·4	9·2	8·6	7·9	8·6	8·6	7·6	7·7	8·2	8·1	8 16	9·4	11 20	7·3
†23	7·9	7·8	7·8	7·8	9·1	8·3	6·6	7·5	8·5	7·9	7·8	7·6	7·9	8 20	9·5	11 30	6·4
†24	7·7	7·8	7·8	7·8	9·1	7·0	5·1	7·3	8·7	7·9	7·8	7·7	7·6	8 10	9·3	11 40	4·7
25	7·8	7·6	6·6	7·7	8·4	7·2	6·0	7·4	8·2	7·8	7·7	7·4	7·6	8 10	8·5	11 30	5·7
26	7·7	7·8	7·5	7·8	8·2	7·3	6·3	7·1	8·2	7·7	7·7	7·7	7·6	8 30	8·4	11 30	6·2
27	7·8	7·9	8·0	7·9	7·9	6·7	6·2	7·5	7·8	7·5	7·6	7·9	7·5	7 24	8·3	11 16	5·8
28	7·9	8·2	7·9	8·1	8·6	7·8	6·8	7·7	8·2	7·6	7·8	7·9	7·9	8 20	8·7	11 40	6·7
29	8·0	7·9	7·9	7·8	9·0	8·1	6·5	7·4	8·1	7·4	7·7	7·7	7·8	8 40	9·6	11 30	6·3
†30	7·8	7·8	7·7	7·9	8·4	7·3	6·3	6·9	7·6	7·4	7·7	7·7	7·6	7 56	8·5	11 30	6·2
31	7·8	7·8	7·8	7·6	9·4	6·3	5·3	6·8	7·8	7·6	7·6	7·5	7·4	7 44	9·5	11 40	5·1
Mean .	7·9	7·8	7·7	7·7	8·7	7·8	6·3	7·1	8·1	7·7	7·7	7·8	7·7				
Mean †.	7·7	7·8	7·8	7·8	9·2	7·8	6·0	6·9	8·1	7·8	7·7	7·7	7·7				

*See footnote on page 49.
†Five international quiet days.
‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

NOVEMBER.

0° PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	′	′	′	′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′
1	7·6	7·6	7·6	7·7	8·0	6·9	6·5	7·4	7·7	7·7	7·5	7·3	7·4	6 44	8·3	11 20	6·2
2	7·4	7·2	7·1	7·0	7·4	6·7	7·3	8·5	8·2	7·5	7·8	7·9	7·6	15 12	9·4	11 20	6·5
3	7·9	7·8	7·6	7·1	7·6	7·4	7·5	8·0	7·5	7·5	7·8	7·7	7·6	13 20	8·5	6 24	6·7
4	7·8	7·8	7·7	7·7	8·3	7·2	7·7	8·8	8·5	7·8	7·8	7·6	**7·9**	13 4	9·1	10 48	6·8
†5	7·7	7·7	7·7	7·8	8·3	8·9	8·3	8·2	8·3	7·3	7·6	7·6	7·9	10 20	9·0	17 38	7·2
6	7·6	7·6	7·6	7·9	8·4	7·3	6·7	7·9	8·1	7·6	7·4	7·9	7·6	7 40	8·6	11 30	6·6
7	7·7	7·5	7·4	7·3	8·4	7·9	7·2	7·9	7·5	7·5	7·7	7·9	7·7	8 30	8·6	11 40	6·8
8	8·2	7·9	7·4	7·2	7·6	6·3	6·3	7·4	7·2	7·2	7·4	7·6	7·3	0 10	8·4	10 10	6·2
9	7·8	7·8	7·5	7·2	7·8	7·5	6·7	7·9	7·5	7·7	7·5	7·8	7·5	14 10	8·2	11 30	6·4
†10	7·9	7·9	7·7	7·1	7·3	7·3	6·5	7·3	7·7	7·6	7·5	7·6	7·4	0 4	8·2	12 20	6·4
11	7·9	7·9	7·5	7·1	8·0	8·4	6·7	7·4	7·9	7·7	7·7	7·5	7·6	9 16	8·8	11 30	6·5
12	7·7	7·4	7·3	7·3	7·7	7·9	7·7	8·9	7·8	7·6	7·6	7·9	7·7	13 48	9·1	6 38	7·0
13	8·2	7·9	7·7	7·4	7·4	6·9	6·7	8·0	8·2	8·0	7·6	7·7	7·5	0 4	8·3	10 56	6·1
14	8·1	8·1	7·9	7·4	7·3	7·0	7·5	9·0	7·9	7·7	7·7	7·6	7·7	13 20	9·3	10 56	6·5
†15	7·7	7·7	7·5	7·3	7·1	7·6	8·0	9·3	7·8	7·5	7·7	7·7	7·8	13 44	9·6	6 48	6·9
16	7·7	7·7	7·5	7·3	7·3	7·8	8·0	9·1	7·7	7·8	7·6	7·5	7·8	13 40	9·5	6 40	6·9
17	7·6	7·4	7·5	7·2	7·3	6·7	6·9	8·1	8·5	7·7	7·5	7·4	7·5	15 20	8·9	10 44	6·2
18	7·6	7·5	7·4	7·1	6·9	6·5	6·7	7·4	7·4	7·4	7·4	7·4	7·2	23 20	7·9	10 44	6·1
19	7·6	7·4	7·3	7·5	7·9	7·0	5·8	7·8	7·9	7·6	7·4	7·5	7·4	15 20	8·4	11 44	5·6
†20	7·5	7·5	7·3	7·2	7·5	6·9	5·9	7·9	7·7	7·6	7·5	7·5	7·3	14 20	8·3	11 32	5·6
21	7·6	7·5	7·4	7·3	6·9	6·6	6·4	8·1	7·7	7·6	7·3	7·4	7·2	13 30	8·4	11 4	5·5
22	7·2	7·3	7·5	7·3	7·6	7·9	7·5	8·4	7·7	7·3	7·2	7·2	7·5	13 52	8·5	6 28	6·7
23	7·4	8·1	7·9	7·7	7·5	7·6	7·0	7·9	7·4	7·4	7·4	7·4	7·5	3 40	8·4	11 10	6·7
24	7·5	7·4	7·3	7·4	7·5	8·2	6·8	7·9	7·9	7·5	7·4	7·5	7·5	9 8	8·4	11 40	6·6
†25	7·4	7·4	7·3	7·3	7·4	7·9	7·3	7·5	7·6	7·4	7·3	7·3	7·4	9 20	8·3	12 40	6·9
26	7·4	7·3	7·3	7·2	7·0	5·5	5·9	7·3	7·3	6·9	6·9	7·1	**6·9**	0 10	7·5	10 44	**5·0**
27	7·3	7·3	7·2	6·5	6·0	6·8	6·7	7·6	7·6	7·4	7·4	7·4	7·1	16 8	8·1	6 4	5·6
28	7·9	7·2	6·7	6·4	7·1	8·8	9·4	9·2	7·9	**8·2**	8·1	7·6	7·8	12 44	**10·1**	6 30	5·9
29	7·6	7·2	6·6	5·9	6·9	7·4	6·9	6·9	8·0	**8·6**	7·5	7·8	7·2	17 16	8·8	7 4	5·5
30	7·6	7·4	6·9	6·9	6·6	6·4	6·5	8·7	8·2	8·1	7·7	7·6	7·4	13 40	8·9	10 24	6·0
Mean .	7·7	7·6	7·4	7·2	7·5	7·3	7·0	8·1	7·8	7·6	7·5	7·6	7·5				
Mean† .	7·7	7·6	7·5	7·3	7·5	7·7	7·2	8·0	7·8	7·5	7·5	7·5	7·6				

DECEMBER.

0° PLUS TABULAR QUANTITIES.

1	7·7	7·5	7·3	7·3	6·8	7·0	6·4	8·1	8·4	7·9	7·8	7·7	7·5	16 8	8·5	11 20	6·2
†2	7·6	7·5	7·5	7·3	7·8	7·3	7·3	7·7	8·1	7·8	7·8	7·6	7·6	15 40	8·3	10 56	6·9
3	7·7	7·4	7·4	7·3	7·4	7·9	7·8	7·8	7·9	7·9	7·7	7·7	7·6	16 30	8·3	6 52	6·9
4	7·5	7·3	7·2	6·9	6·8	7·4	8·0	8·1	8·2	8·2	7·6	7·5	7·6	16 24	9·1	6 44	6·3
5	7·9	8·2	7·8	7·4	6·6	7·1	8·1	8·9	7·4	7·9	7·8	7·9	**7·7**	13 40	8·9	8 32	6·3
6	8·0	8·1	7·5	7·3	7·2	7·7	8·3	8·0	7·1	7·7	7·9	7·7	7·7	13 8	8·7	7 30	6·8
†7	7·9	8·0	7·5	7·2	6·4	6·7	7·7	8·8	6·9	7·7	7·8	7·8	7·5	13 30	8·9	7 48	6·1
8	8·0	7·7	7·6	7·1	7·1	7·4	8·1	8·9	7·2	7·5	7·5	7·8	7·6	13 40	9·1	7 4	6·9
9	7·9	7·6	7·4	7·1	6·7	7·0	7·2	7·9	7·3	7·7	7·8	8·3	7·5	23 40	8·7	6 40	6·4
10	8·4	9·0	8·7	7·6	5·7	6·2	7·3	8·6	7·6	7·6	7·8	7·7	7·7	2 36	9·3	8 20	5·2
11	7·8	7·9	7·4	6·9	6·5	7·9	8·2	8·8	7·4	7·7	7·6	7·6	7·6	14 10	9·0	7 20	6·2
12	7·6	7·4	7·2	6·7	6·3	6·7	7·2	8·5	7·4	7·9	7·7	7·5	7·3	13 30	8·8	8 20	6·1
13	7·5	7·2	6·8	6·5	6·0	7·4	7·5	8·7	8·4	8·7	7·6	7·4	7·4	14 4	9·2	7 12	5·8
14	7·7	7·7	7·2	6·6	6·0	5·9	6·1	7·5	7·7	8·1	7·6	7·5	7·1	17 40	8·3	6 40	5·8
15	7·6	7·4	7·1	6·7	6·7	7·2	7·6	7·5	8·0	7·6	7·6	7·5	7·3	14 44	8·3	7 10	6·5
16	7·5	7·2	7·2	6·6	6·6	7·3	7·3	7·2	7·6	7·6	7·5	7·4	7·2	14 56	7·9	4 40	6·1
†17	7·4	7·2	7·1	6·9	6·5	7·4	6·4	6·6	6·5	7·4	7·4	7·2	7·0	9 32	7·6	11 40	6·1
18	7·3	7·2	7·1	6·7	7·1	7·5	6·1	7·8	7·8	7·4	7·3	7·3	7·2	14 20	8·2	12 10	5·9
19	7·3	7·1	6·9	6·3	6·1	6·9	6·7	7·6	7·9	7·6	7·3	7·3	7·1	14 32	8·2	6 36	5·9
20	7·2	7·1	6·9	6·5	6·1	7·0	6·8	7·7	8·2	7·3	7·2	7·2	7·1	15 30	8·5	7 8	5·9
†21	7·3	7·2	6·8	6·5	6·4	7·3	7·6	7·5	8·1	8·0	7·3	7·3	7·3	16 56	8·5	6 48	6·0
†22	7·1	7·1	6·9	6·8	6·6	7·3	7·4	8·8	7·4	7·3	7·1	7·1	7·2	13 30	9·1	7 8	6·3
23	7·3	7·3	6·9	6·5	5·9	7·6	7·4	7·7	7·3	7·3	7·2	7·3	7·1	10 20	8·0	6 56	5·9
24	7·6	7·7	6·9	6·5	5·4	5·6	7·8	7·8	7·8	8·0	7·3	7·5	7·1	1 30	8·3	8 4	5·2
25	7·5	7·2	6·4	6·2	5·9	7·5	8·2	8·3	7·5	7·5	7·3	7·5	7·3	12 32	9·0	7 20	5·6
26	7·4	7·0	6·3	6·1	5·3	5·6	6·5	7·4	8·4	7·9	7·9	7·5	7·0	18 40	**9·5**	7 30	**5·0**
27	7·4	6·7	7·1	5·5	6·0	5·8	6·8	7·4	7·7	7·7	7·3	7·4	6·9	15 16	8·6	5 48	5·3
28	7·1	7·0	6·8	6·2	6·5	7·0	6·8	6·8	7·3	7·0	7·2	7·2	6·9	23 28	7·8	6 40	5·7
29	7·6	7·7	7·0	6·5	6·3	7·2	7·7	7·0	7·5	7·5	7·3	7·2	7·1	10 48	8·0	7 10	6·1
30	7·1	6·9	6·7	6·7	6·7	6·8	5·3	6·1	7·7	7·2	7·1	7·0	6·9	16 8	8·0	11 40	5·2
31	6.9	6·8	6·5	6·4	6·2	6·8	6·1	6·7	7·3	7·1	7·2	7·0	**6·7**	16 20	7·5	11 40	5·8
Mean .	7·5	7·4	7·1	6·7	6·4	7·0	7·2	7·8	7·7	7·7	7·5	7·5	7·3				
Mean† .	7·5	7·4	7·1	6·9	6·7	7·2	7·3	7·9	7·4	7·6	7·5	7·4	7·3				

*See footnote on page 49.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

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36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean. *	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	951	953	953	957	962	967	957	950	957	962	960	967	959	23 48	971	13 24	948
2	973	973	975	974	985	997	989	973	962	965	958	958	973	10 4	999	21 36	954
3	962	959	960	964	971	991	986	871	963	958	956	966	967	10 48	999	19 52	955
4	965	967	967	973	974	985	980	970	957	962	959	959	967	10 4	987	15 32	955
5	957	953	961	974	956	966	973	972	964	959	960	961	963	5 44	974	2 12	951
6	957	961	963	962	974	982	999	984	969	965	963	953	969	11 46	1000	22 0	951
†7	956	963	961	958	961	979	987	974	968	961	962	957	966	11 22	989	0 18	953
†8	957	957	961	961	964	980	994	983	969	963	966	966	969	11 30	995	0 32	955
9	966	967	972	973	978	989	1001	987	979	968	960	952	974	11 30	1001	21 6	947
10	962	965	970	974	975	983	991	976	970	966	960	952	970	10 32	996	23 20	941
11	941	949	956	962	975	989	983	961	948	949	949	947	960	9 36	990	0 4	941
12	955	958	961	967	967	979	978	972	971	962	962	959	966	10 42	983	0 4	955
13	958	959	965	967	972	983	965	983	984	975	962	957	969	9 30	992	20 48	953
14	963	954	957	972	970	971	972	957	960	958	957	960	962	11 0	980	0 38	951
15	962	962	967	967	969	976	987	965	972	965	961	969	969	11 40	990	2 40	960
16	975	970	966	968	978	996	987	970	964	966	967	969	973	10 32	1000	15 8	960
17	973	966	972	972	983	988	978	970	967	972	969	973	974	9 32	989	2 18	963
†18	975	976	979	983	993	1001	990	990	982	975	974	970	972	9 44	1002	21 8	967
†19	975	966	968	975	992	1013	1008	985	972	964	964	965	979	10 30	1017	19 4	962
20	968	970	973	977	991	1016	1016	1018	1001	988	968	973	987	11 18	1021	22 42	944
21	960	962	972	963	970	968	961	962	957	957	955	941	960	9 26	980	21 42	938
22	955	959	960	964	963	970	967	946	954	945	951	953	957	10 12	975	14 4	943
23	957	964	957	963	969	979	973	973	964	943	951	958	962	10 6	983	17 30	934
24	948	955	968	964	958	960	969	975	959	962	958	958	963	10 48	978	0 4	948
25	973	965	962	960	961	961	970	974	972	963	956	958	964	14 8	980	20 36	954
26	962	964	966	970	965	959	960	967	969	969	969	967	966	17 8	974	10 48	959
†27	971	970	969	969	973	979	980	980	977	971	963	964	972	10 34	983	20 42	962
28	964	964	966	970	980	989	995	983	969	966	964	963	973	11 12	997	22 32	960
29	962	961	969	976	986	1007	1018	985	981	981	963	954	979	12 4	1024	22 34	947
30	960	961	971	967	983	983	978	978	966	957	959	943	969	10 10	990	22 0	943
31	961	964	962	965	977	981	995	975	963	966	963	967	970	11 26	997	0 20	959
Mean .	962	963	965	968	973	983	983	975	968	964	961	960	968				
Mean† .	967	967	967	969	977	990	992	982	974	967	966	964	971				

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36000γ PLUS TABULAR QUANTITIES.

1	961	961	967	967	970	979	984	971	970	970	964	951	968	11 4	985	21 50	951
2	978	963	967	977	995	992	1002	985	975	975	973	965	978	12 0	1004	22 36	961
3	961	961	965	967	975	987	990	979	955	944	937	937	963	11 24	991	20 20	933
4	953	957	953	957	962	967	979	969	959	946	954	949	959	11 24	979	17 24	945
5	956	971	963	962	968	974	986	985	974	962	957	965	969	13 8	988	0 20	956
6	965	969	969	979	991	1010	1014	1003	991	972	968	966	983	9 42	1015	1 22	963
7	967	973	967	971	975	987	998	996	977	969	950	932	971	13 32	999	21 22	929
8	956	953	958	957	966	985	985	971	967	961	963	960	966	10 32	999	0 54	949
†9	958	965	969	972	972	987	986	982	977	970	970	968	974	10 52	993	0 4	957
10	970	972	971	972	972	986	993	984	957	931	948	953	966	11 28	995	17 56	931
11	952	959	961	963	965	973	981	965	971	970	965	966	967	12 8	981	0 20	949
†12	966	967	970	972	975	986	990	976	974	969	972	971	975	10 56	994	17 28	963
†13	973	975	976	980	993	993	990	980	975	976	973	973	980	8 38	997	20 42	968
14	972	974	980	987	1004	1020	1022	996	984	980	974	981	990	11 8	1027	0 0	972
15	979	993	983	975	988	1004	1009	990	979	969	974	972	984	11 28	1012	17 20	969
16	972	972	974	977	998	1021	1032	1029	998	992	969	958	990	12 22	1037	21 22	955
17	980	964	969	978	987	1008	1003	994	967	969	970	981	980	10 28	1011	23 36	956
18	957	956	969	966	992	1011	1022	986	972	966	963	962	976	11 40	1039	2 4	956
19	962	964	968	971	984	1012	1012	989	978	967	969	971	979	10 28	1016	0 44	959
20	968	964	967	975	985	993	1002	992	979	972	969	977	979	11 20	1003	2 12	961
†21	973	971	972	973	990	1011	1016	1000	984	975	973	972	984	10 50	1021	2 4	969
22	975	974	973	975	983	995	987	980	972	967	966	967	976	10 30	997	16 50	965
†23	969	971	973	974	989	1004	1007	993	985	979	979	976	984	12 4	1008	1 4	967
24	977	977	977	978	985	1003	1011	993	983	976	979	979	985	11 44	1011	3 4	976
25	980	986	989	990	1025	1021	981	976	939	909	924	977	971	8 24	1038	17 58	906
26	936	936	956	953	956	964	977	946	947	945	957	948	950	11 53	978	14 40	915
27	955	954	951	948	959	965	965	935	926	938	964	924	947	10 20	968	15 0	916
28	932	952	947	941	945	956	959	953	949	944	955	940	949	22 32	972	0 26	930
Mean .	964	966	968	970	980	993	996	982	970	963	964	962	973				
Mean† .	968	969	972	974	984	996	998	986	979	974	974	972	979				

*The daily mean ordinates derived from 24 hourly tabulations of H. F. magnetograms and corrected for the progressive change by 1/48 of the difference between the ordinates corresponding to the initial and the terminal hours are next converted into C. G. S. unit by means of the scale coefficient for 1 cm. of ordinate on photographic paper and finally these converted ordinates added to the base-line values corrected to the mean temperature of the day give the absolute values of the daily means of horizontal force.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

MARCH. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡ 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	948	949	949	952	965	981	986	969	957	956	953	950	960	11 30	990	2 22	943
2	955	953	955	956	970	984	988	982	971	959	954	961	965	12 8	991	21 16	948
3	957	957	959	963	976	998	1014	999	974	958	951	953	972	12 20	1018	20 8	950
4	956	962	959	965	963	984	996	981	965	953	948	952	965	12 8	998	19 30	947
5	957	957	956	959	978	1002	1003	983	964	966	965	965	972	10 40	1006	3 0	953
6	961	964	971	970	978	996	1011	998	983	974	972	972	979	12 4	1012	0 2	961
7	971	972	971	973	984	1005	1017	995	975	957	939	935	974	11 44	1018	20 48	933
†8	949	961	968	968	975	995	1011	999	983	974	971	972	978	12 20	1014	0 0	949
†9	971	971	972	978	981	992	1005	1001	994	979	979	977	983	12 8	1008	2 0	970
†10	977	978	979	981	985	1002	1012	999	982	981	976	975	985	11 20	1014	21 0	971
†11	978	980	983	984	991	1013	1023	1013	995	986	980	974	**991**	12 20	1027	21 44	972
12	978	979	982	982	992	1003	1020	1008	994	982	980	988	991	12 0	1020	18 48	976
13	984	983	975	978	986	1011	1013	994	989	976	965	973	985	11 4	1019	19 0	961
14	973	978	976	974	971	1007	1011	998	985	974	970	978	985	10 56	1016	19 50	970
15	986	994	991	982	985	1011	1008	995	978	972	971	969	986	10 52	1027	20 36	965
16	975	982	977	975	986	1009	1003	990	971	971	961	966	979	9 52	1010	20 40	955
17	973	974	974	969	977	1003	1006	979	974	972	969	969	978	11 10	1012	6 20	963
18	970	975	974	976	989	1012	1026	1001	982	975	974	971	985	12 4	1029	22 18	967
19	970	969	976	973	971	991	1005	985	968	970	969	968	977	11 30	1006	20 0	969
20	970	971	973	974	988	1016	1020	998	987	984	978	983	987	10 40	1023	0 24	969
21	982	997	984	976	981	1007	1007	997	978	952	951	948	978	10 32	1014	20 40	944
22	950	951	956	966	971	983	981	975	967	961	959	961	966	10 32	986	0 36	949
†23	967	970	974	977	989	1011	1023	1000	980	977	976	972	985	11 52	1024	0 40	967
24	971	975	983	987	1002	1029	1021	1012	952	894	939	882	965	10 20	**1037**	23 40	**854**
25	860	893	939	923	927	944	929	934	923	912	919	921	**926**	2 32	961	23 51	860
26	929	935	937	946	955	964	978	946	945	933	945	940	947	11 44	979	19 4	917
27	953	948	943	942	947	962	975	952	924	943	933	944	946	11 20	979	17 4	920
28	939	942	943	954	953	971	973	969	955	957	950	948	956	10 28	978	0 16	939
29	955	951	956	955	954	974	985	972	964	961	957	955	961	11 56	986	21 8	945
30	957	955	955	956	963	979	972	962	959	961	959	956	961	10 36	979	23 48	951
31	954	953	951	959	975	1002	995	983	973	962	959	952	968	10 36	1006	22 20	948
Mean .	961	964	966	967	975	995	1001	986	971	962	960	959	972				
Mean† .	968	972	975	977	985	1002	1015	1004	987	979	977	974	985				

APRIL 36000γ PLUS TABULAR QUANTITIES.

1	957	956	959	960	974	1002	993	982	970	970	963	958	970	10 4	1003	21 20	953
†2	968	969	966	971	993	1014	1010	985	973	973	970	967	980	11 16	1016	0 44	962
3	968	969	975	981	1014	1027	1028	1004	984	975	971	967	**989**	10 40	**1033**	22 40	963
4	968	972	975	977	990	1016	1018	1003	984	979	973	977	985	11 20	1021	0 4	967
†5	970	975	975	977	983	1006	1003	988	973	982	977	971	982	10 32	1008	0 24	969
6	974	972	973	976	986	1011	1022	1010	992	984	975	976	988	11 20	1023	23 44	969
7	973	972	972	972	978	994	996	989	978	962	955	951	974	10 20	998	23 20	948
8	953	961	972	969	979	1007	1007	1001	991	984	981	973	982	10 40	1009	0 0	953
9	975	973	980	979	986	1016	1013	991	982	982	973	978	985	10 30	1019	23 48	964
10	965	976	971	970	991	1007	1015	1000	987	988	978	973	986	10 48	1023	0 12	964
11	987	985	978	987	999	1016	1012	980	979	973	973	975	987	10 36	1017	23 30	971
12	973	967	973	977	970	1004	997	992	977	963	955	974	976	10 24	1009	21 12	943
13	964	975	968	969	987	1008	1020	1002	979	974	961	959	981	10 44	1025	21 48	958
14	967	968	981	968	958	1001	1008	982	973	960	952	963	973	10 50	1011	19 40	950
15	966	967	968	966	984	1019	1014	1001	983	967	959	962	980	10 28	1024	20 12	956
16	965	967	969	971	985	1014	1017	994	976	970	974	978	983	10 36	1018	0 30	965
†17	976	975	976	977	992	1021	1015	999	981	971	971	971	985	10 18	1024	17 12	968
18	971	971	974	973	981	1014	1017	998	983	980	977	967	984	11 8	1028	22 0	966
19	975	973	974	972	989	1018	1017	1002	984	977	974	974	986	10 40	1020	5 52	972
20	975	975	976	976	980	1020	1019	995	976	977	970	972	983	9 52	1020	22 16	965
21	966	970	957	970	975	995	1007	973	971	957	942	956	974	10 48	1016	19 50	**942**
22	961	971	957	955	967	978	993	973	958	946	952	972	965	11 48	995	18 20	942
23	968	964	958	963	957	972	988	973	959	959	953	961	**964**	11 20	991	18 16	949
24	971	963	962	966	970	1002	999	981	958	952	952	965	969	11 4	1007	19 0	951
25	959	967	960	968	973	989	986	981	975	967	964	962	970	11 16	992	0 20	956
†26	962	963	963	967	979	1008	997	986	977	969	964	964	975	9 44	1009	0 0	959
†27	968	969	968	969	970	985	989	987	984	969	967	967	974	10 40	992	22 40	966
28	965	963	961	970	983	1007	1011	994	979	974	968	969	979	10 52	1013	2 18	960
29	969	964	965	965	981	1000	1003	995	984	977	971	970	979	10 48	1006	2 36	960
30	974	973	976	977	983	999	999	989	986	981	973	975	982	11 16	1002	2 8	971
Mean .	968	970	969	971	981	1006	1007	991	978	971	966	968	979				
Mean† .	969	970	969	972	983	1007	1003	989	978	973	969	968	979				

*See foot note on page 55.
†Five international quiet days.
‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

MAY. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
†1	978	975	973	977	989	1012	1009	997	988	981	980	977	987	10 20	1014	2 20	972
2	982	984	985	991	994	1014	1012	996	981	974	974	973	988	11 0	1016	21 48	972
3	975	976	978	979	992	1020	1022	1000	990	990	978	981	990	10 28	1025	23 32	969
4	973	976	990	982	973	983	995	977	976	967	967	970	977	11 56	995	18 40	963
5	973	970	967	961	969	999	1011	1002	980	967	962	965	977	11 56	1011	23 16	959
6	966	969	968	971	984	1018	1029	1008	982	974	973	972	985	11 56	1030	0 56	964
7	975	973	975	979	995	1016	1025	1011	993	984	981	981	991	11 40	1026	23 52	966
8	968	976	981	981	993	1028	1016	996	983	971	970	969	986	10 20	1031	20 28	968
9	975	977	976	972	989	1006	1006	988	973	969	969	969	981	9 12	1009	18 44	965
10	974	973	971	974	988	1006	1006	993	983	976	967	974	982	10 36	1011	19 4	966
11	975	975	975	979	989	1004	1006	993	983	983	977	978	984	11 20	1007	20 48	972
†12	977	978	978	979	983	996	1003	1000	990	977	974	977	984	12 30	1004	18 56	971
†13	977	980	978	976	986	1003	1008	996	983	985	981	982	986	11 4	1012	5 40	975
14	981	984	983	985	995	1007	1009	997	975	972	972	975	986	11 16	1014	18 20	970
15	976	980	987	979	993	1003	1017	1005	991	971	970	973	987	12 16	1020	18 24	963
16	976	976	975	980	992	1015	1015	997	987	979	983	983	989	10 40	1019	0 12	975
17	985	983	992	989	1015	1037	1036	1027	1003	986	955	934	**995**	10 30	**1045**	22 8	**927**
18	949	953	969	962	970	957	973	970	973	947	949	959	961	12 30	981	20 12	945
19	967	957	965	955	959	976	978	971	961	963	963	967	965	11 56	980	6 16	953
20	963	963	963	974	979	1001	1010	999	984	971	963	963	979	11 20	1010	20 30	958
21	968	968	968	974	978	995	998	985	976	968	961	957	975	11 24	1004	21 24	954
†22	968	961	963	965	979	993	1003	999	984	970	968	966	977	11 32	1004	0 4	960
23	966	968	969	972	969	988	1003	995	977	962	961	963	974	11 48	1004	20 36	958
†24	966	964	965	966	974	986	992	988	973	972	975	975	975	12 20	993	2 24	961
25	976	973	973	976	997	1014	1022	1012	997	985	983	979	990	12 20	1025	1 8	971
26	978	975	977	979	995	1004	1007	1003	994	969	966	974	985	12 0	1009	18 4	963
27	977	978	978	980	999	1011	1019	1006	990	983	980	974	990	10 52	1020	23 32	971
28	976	978	981	984	987	1010	1012	1002	985	976	978	980	988	11 0	1016	1 24	975
29	978	978	976	980	988	999	1001	1002	985	966	937	955	979	12 28	1006	20 0	937
30	967	965	961	969	965	967	977	967	955	942	930	969	**959**	12 0	978	19 48	929
31	951	960	959	962	965	978	989	978	976	971	970	973	971	10 52	990	0 4	950
Mean .	972	973	974	975	985	1001	1007	996	982	973	968	971	981				
Mean† .	973	972	971	973	982	998	1003	996	984	977	976	975	982				

JUNE. 36000γ PLUS TABULAR QUANTITIES.

1	976	976	975	974	983	1002	1001	996	981	979	975	975	983	10 30	1005	2 32	971
2	984	980	977	981	979	989	1004	993	982	975	975	975	982	12 4	1004	22 52	971
3	976	977	977	981	993	1012	1017	1008	995	985	979	977	990	12 40	1017	0 0	975
4	981	996	992	992	995	961	1016	991	980	971	974	969	987	11 16	1022	20 32	966
5	972	981	993	984	994	980	991	990	954	961	965	966	977	12 10	996	16 20	945
6	968	968	970	973	985	1009	1012	995	980	978	968	964	981	11 8	1015	20 56	960
7	973	977	977	983	988	1003	1011	1001	988	975	969	972	985	11 56	1012	19 20	969
8	975	977	978	979	986	995	1010	1003	985	978	978	976	985	12 28	1012	22 0	974
†9	976	979	979	981	994	1019	1026	1014	989	975	976	979	991	10 52	1026	18 16	974
†10	981	982	980	981	996	1009	1013	1011	990	984	982	982	991	10 44	1015	1 0	977
11	983	986	986	988	1002	1017	1030	1022	988	986	992	991	998	11 48	1030	16 4	982
12	991	988	988	990	1001	1005	1000	985	973	983	985	984	989	10 20	1006	16 20	971
13	987	1017	1029	972	963	1003	983	986	937	952	942	949	977	4 8	1032	20 14	922
14	950	966	962	959	966	966	973	973	957	965	967	959	**966**	23 8	989	0 0	954
15	976	965	966	964	979	999	1006	993	967	957	963	963	975	12 8	1007	18 4	955
16	974	969	969	970	978	999	1011	1001	976	967	964	969	979	11 44	1011	17 12	964
†17	969	969	969	970	983	999	1010	1001	984	975	975	974	982	11 56	1011	2 36	965
†18	975	975	977	978	996	1021	1033	1018	993	976	978	980	991	11 20	1034	0 40	972
19	978	979	979	979	991	1020	1028	1011	985	971	980	982	990	11 8	1029	17 24	969
20	981	985	985	983	993	1020	1016	1003	976	977	979	972	989	10 28	1024	16 20	971
21	976	980	976	993	1007	1037	1023	1016	994	967	968	978	993	10 12	1046	18 8	965
22	981	979	980	979	996	1020	1021	1008	991	973	971	973	989	10 28	1024	18 8	966
23	977	980	979	979	973	991	1010	1006	993	985	984	983	987	12 52	1013	7 20	972
†24	984	984	981	983	999	1010	1025	1011	991	986	982	985	993	11 36	1025	4 52	979
25	987	987	987	992	1006	1027	1030	1011	993	987	986	986	998	10 28	1033	19 20	983
26	984	985	985	987	996	1011	1010	1003	992	991	988	987	994	10 40	1014	0 20	981
27	990	995	999	999	1015	1017	1004	998	981	975	965	971	992	8 56	1021	19 8	961
28	972	975	972	983	983	996	992	989	982	975	972	973	981	10 52	1003	2 24	969
29	978	979	979	981	991	1006	1012	1007	989	977	974	981	988	13 20	1013	19 40	974
30	976	979	989	991	1005	1037	1029	1009	984	937	901	891	974	10 32	**1047**	22 50	**879**
Mean .	978	981	981	981	991	1006	1012	1002	982	974	972	972	986				
Mean† .	977	978	977	979	994	1011	1021	1009	989	979	979	980	989				

*See foot-note on page 55.
†Five international quiet days.
‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

JULY. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	914	936	948	959	975	989	991	974	959	957	963	965	963	11 30	992	0 2	909
2	971	971	972	971	973	993	995	975	969	960	954	969	971	11 4	1003	20 12	953
3	951	956	965	968	980	993	1008	1004	989	981	982	985	981	12 24	1010	0 12	949
4	985	987	987	988	1007	1016	1020	1016	997	985	981	980	996	10 48	1023	21 20	977
†5	979	981	981	984	1005	1026	1026	1025	995	981	981	981	995	10 12	1026	1 8	976
6	988	985	995	999	1008	1032	1046	1041	1020	996	988	994	1008	13 8	1048	0 12	984
7	998	1001	1002	978	961	964	979	984	983	979	975	982	982	0 24	1011	8 56	952
8	978	972	973	974	981	1013	1023	1015	994	984	983	977	989	10 56	1028	2 8	969
9	979	982	982	983	992	1009	1010	1013	1000	991	986	993	994	10 20	1015	0 8	978
10	996	988	1002	1001	1005	1010	1026	1017	1002	967	977	994	997	12 4	1026	18 18	965
11	980	961	973	980	992	1012	1032	1020	1000	974	977	977	989	11 16	1033	1 54	957
12	978	980	982	982	994	1008	1016	1011	991	986	979	981	991	11 44	1016	0 20	973
13	980	979	981	986	1009	1036	1031	1014	994	983	983	984	997	10 52	1039	0 32	977
†14	986	986	985	985	1003	1020	1033	1021	1003	992	992	991	1000	12 4	1035	4 32	984
†15	992	991	991	992	1020	1045	1048	1027	1008	993	993	993	1008	10 40	1053	5 20	987
16	993	993	994	995	1017	1047	1044	1029	1006	994	993	996	1009	10 32	1054	0 28	991
17	991	990	995	996	1006	1022	1032	1022	1007	995	995	1000	1004	11 24	1033	1 28	989
18	993	983	989	997	1012	1039	1043	1027	1028	992	993	997	1009	11 24	1053	2 10	983
19	997	1005	999	1009	1002	1011	1025	1007	990	983	985	988	1000	11 36	1027	18 20	980
20	991	990	991	994	999	1012	1015	1012	987	979	979	984	994	13 40	1017	17 40	976
†21	988	988	990	992	1000	1013	1023	1017	1004	994	990	989	999	10 36	1023	2 24	987
22	990	994	997	996	1005	1025	1029	1017	1004	1006	1002	1003	1006	11 20	1031	0 4	989
23	1004	1001	1011	1016	1010	989	1014	1023	1001	978	969	978	999	13 28	1025	19 40	967
†24	979	978	982	984	994	1009	1024	1019	997	989	985	986	994	12 20	1024	1 58	977
25	988	991	991	993	999	1008	1025	1018	1002	989	995	993	999	12 40	1025	0 30	984
26	992	991	996	999	1021	1044	1046	1036	1014	999	995	992	1011	12 40	1048	1 0	990
27	994	992	997	997	1004	1026	1029	1033	1018	992	981	987	1004	14 0	1033	19 12	979
28	984	989	996	994	996	1007	1009	1002	988	989	993	986	995	11 30	1010	0 10	983
29	993	993	996	997	1007	1024	1041	1033	1011	993	991	993	1006	11 40	1042	21 20	987
30	997	996	999	1001	1020	1046	1040	1027	1005	1002	1000	998	1011	10 20	1047	2 0	994
31	999	1000	1001	1003	1016	1031	1022	1022	1011	1003	998	996	1008	10 20	1031	22 20	992
Mean .	985	985	988	990	1000	1017	1024	1016	999	987	985	987	997				
Mean† .	985	985	986	987	1004	1022	1031	1022	1001	990	982	988	999				

AUGUST. 36000γ PLUS TABULAR QUANTITIES.

†1	997	999	1003	1005	1017	1041	1055	1041	1026	1007	1007	1004	1017	12 12	1057	0 40	995
2	1000	999	998	996	1007	1010	1029	1025	1013	1003	998	1003	1007	12 28	1031	5 30	995
3	1006	1001	1009	1004	1009	1030	1034	1012	954	978	987	990	1001	11 4	1038	15 40	952
4	977	993	989	987	991	998	978	985	987	982	977	982	985	10 8	1001	12 24	974
5	980	986	987	988	989	1003	1008	1001	986	983	987	987	991	12 40	1009	0 4	979
6	990	990	989	993	1000	1023	1020	1022	986	989	982	980	997	13 16	1031	16 20	973
7	980	987	989	989	1005	1029	1025	1009	995	990	987	986	998	10 36	1032	0 48	977
8	992	992	991	992	997	1010	1007	1009	1004	991	990	991	998	10 44	1013	4 8	986
9	991	994	996	997	1009	1043	1046	1033	1007	994	991	988	1007	11 40	1051	20 40	985
10	994	995	992	994	1001	1039	1038	1023	1008	996	991	990	1006	10 56	1041	22 4	987
11	997	995	995	992	1004	1020	1022	1011	1004	997	994	991	1001	11 20	1023	22 28	989
12	989	997	997	997	997	999	1013	1019	1011	998	996	992	1001	12 40	1022	0 0	989
13	992	993	1006	1002	1007	1027	1020	1022	1008	1010	1006	1009	1010	10 52	1035	0 4	992
14	1017	1002	993	994	1003	1002	999	996	987	975	978	981	993	0 20	1018	18 24	964
15	987	981	982	992	990	1009	1024	1012	987	969	969	965	989	11 40	1025	17 24	960
16	981	983	984	985	987	1001	996	992	994	997	997	990	991	9 40	1002	1 30	979
17	996	994	985	990	987	1006	1017	1012	994	986	986	988	994	11 16	1018	4 16	984
†18	990	988	988	990	1006	1033	1033	1022	1009	994	991	993	1004	10 32	1034	3 4	986
19	994	1000	998	1001	1013	1035	1043	1029	1018	1008	997	994	1011	11 30	1043	0 4	994
20	994	996	1000	1003	997	991	988	1001	1000	987	984	985	994	5 36	1003	19 20	976
†21	985	985	989	989	996	1003	1014	1013	1004	996	993	989	996	12 20	1018	2 28	983
22	991	994	991	991	988	1001	1014	1013	1005	996	993	995	998	13 4	1018	8 0	988
23	991	992	994	990	979	1005	1021	1016	1001	994	991	993	998	12 8	1024	7 40	978
24	996	993	997	998	1013	1038	1044	1029	971	970	983	982	1000	11 36	1047	16 36	966
25	983	986	990	991	987	1021	1021	1005	996	1001	1000	997	998	11 24	1024	1 4	981
26	993	986	987	995	998	1011	1025	1017	1015	1007	1003	997	1003	12 4	1026	2 32	984
27	995	995	996	998	1005	1024	1031	1017	1002	995	993	991	1004	11 24	1032	23 36	988
†28	989	996	993	991	990	1003	1007	1011	995	989	990	992	996	13 8	1015	17 10	984
†29	993	993	993	990	997	1012	1015	1009	1005	998	994	995	999	12 8	1015	5 30	988
30	995	999	998	1000	1014	1032	1041	1032	1017	1001	1000	1002	1011	12 8	1043	0 12	983
31	1006	1004	1003	1008	1014	1022	1023	1013	990	992	991	993	1004	11 40	1025	16 30	986
Mean .	992	993	994	995	1000	1017	1021	1015	999	993	991	991	1000				
Mean† .	991	992	993	993	1001	1025	1023	1019	1008	997	995	995	1002				

*See foot-note on page 55.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

SEPTEMBER. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡ 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Maximum. Mag.	Minimum. Time.	Minimum. Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	993	992	989	992	999	1023	1023	1015	998	992	982	972	997	10 24	1028	22 30	969
2	990	986	989	990	989	1013	1013	1007	1007	1004	1000	1001	1000	10 32	1017	1 20	981
3	1000	997	1009	1004	1009	1029	1019	1017	1002	997	997	997	1007	10 8	1031	22 8	993
4	1003	995	996	996	1000	1022	1033	1021	1000	982	983	988	1001	12 40	1036	17 48	980
5	989	992	993	992	999	1009	1012	1007	993	993	990	993	997	11 36	1014	0 8	984
6	991	990	991	991	997	1025	1020	1007	999	997	992	991	999	10 20	1025	1 8	987
†7	996	995	997	999	990	1008	1026	1016	996	989	987	990	999	12 20	1026	19 8	983
†8	993	994	993	994	988	995	1003	1001	999	1001	997	998	997	11 20	1003	8 0	987
9	997	998	999	997	1001	1019	1032	1030	1018	1000	990	995	1006	12 40	1037	20 30	985
10	990	997	1003	986	974	988	995	995	969	975	985	980	987	3 20	1028	15 56	967
11	990	994	986	983	992	1009	1007	995	989	988	998	994	993	10 20	1011	3 28	983
12	997	992	988	986	983	1017	1033	1023	992	981	981	983	995	11 20	1033	7 0	980
13	983	987	989	993	988	997	1004	1009	1004	986	979	990	993	12 44	1011	19 8	976
14	988	989	989	997	1005	1037	1041	1001	993	976	976	975	998	10 40	1047	19 48	975
15	978	981	983	986	990	1001	1023	1015	1004	996	995	990	996	11 56	1023	0 8	976
†16	987	989	992	991	987	998	1016	1009	992	987	980	986	993	12 4	1021	20 8	980
17	985	986	987	990	1007	1041	1038	1026	1005	995	994	988	1003	10 30	1044	0 12	983
18	985	985	983	993	991	1023	1019	1018	1000	992	984	986	997	12 40	1028	3 12	976
19	987	987	991	989	993	1012	1022	1011	999	994	990	992	997	11 32	1023	3 16	983
20	993	993	992	996	1007	1025	1029	1015	1008	1002	995	992	1004	12 8	1032	0 32	989
†21	996	997	999	999	993	1002	996	998	994	995	995	994	997	9 40	1025	7 40	993
†22	997	998	998	996	995	1024	1027	1007	994	999	999	1001	1003	10 52	1029	15 40	992
23	1001	1006	1004	997	999	1015	1027	1018	998	996	994	990	1004	11 8	1028	23 22	987
24	991	994	991	989	996	1007	1017	1012	997	996	991	989	998	12 40	1017	23 40	987
25	987	989	991	995	1006	1043	1040	1025	1007	999	995	998	1007	11 8	1049	1 32	985
26	1001	995	995	999	1006	1023	1000	990	986	959	978	976	994	10 8	1035	18 4	957
27	968	992	989	948	933	922	925	938	928	915	910	905	938	1 42	995	22 34	894
28	933	920	960	943	965	966	968	958	951	952	950	954	951	10 32	975	1 40	913
29	956	959	961	962	963	980	983	970	965	979	986	976	971	10 40	987	0 40	952
30	973	973	975	980	976	991	1000	984	975	979	974	978	980	11 4	1001	6 56	964
Mean .	987	988	990	989	991	1009	1013	1005	992	987	985	985	993				
Mean† .	994	995	996	996	991	1005	1014	1006	995	994	991	994	998				

OCTOBER. 36000γ PLUS TABULAR QUANTITIES.

1	971	973	978	983	986	997	997	988	980	976	972	971	981	10 8	1000	20 30	970
†2	975	975	976	975	983	1022	1028	1002	988	982	975	975	989	10 36	1035	2 20	972
†3	979	980	981	981	979	1000	999	987	985	985	982	981	985	10 52	1007	7 30	977
4	982	981	970	981	988	995	995	986	981	978	979	978	983	10 40	1000	17 44	975
5	979	981	981	987	985	998	1005	993	987	982	979	977	986	12 4	1006	23 20	972
6	974	976	980	985	993	1012	1011	1002	988	988	984	985	990	10 12	1018	0 28	967
7	979	978	981	985	995	1008	1013	993	974	969	973	974	985	10 36	1017	17 4	966
8	976	977	979	981	988	1004	1003	982	960	950	964	977	978	9 56	1005	18 8	944
9	981	978	976	977	994	1016	1024	999	976	968	970	971	986	11 48	1025	18 4	965
10	976	974	975	982	981	1001	1030	1018	1007	991	1002	969	992	12 4	1031	21 56	967
11	985	983	982	980	1001	990	997	996	978	951	962	958	979	8 28	1010	17 48	950
12	969	975	976	978	985	999	1001	976	974	974	979	980	981	11 8	1009	0 32	967
13	979	975	975	982	1003	1023	1024	1004	989	981	979	977	991	10 40	1025	2 30	970
14	979	984	984	984	994	1015	1024	1009	997	992	992	991	996	11 30	1025	1 20	978
15	992	980	991	994	1004	1013	1024	948	966	947	915	951	974	11 0	1030	20 8	906
16	951	962	957	968	969	952	963	948	947	915	919	946	949	0 32	992	18 48	896
17	957	959	963	945	915	914	921	924	924	931	919	938	932	2 48	974	8 40	909
18	945	956	967	962	959	971	987	954	952	963	949	965	961	12 28	993	20 16	939
19	966	997	960	964	966	988	989	975	986	958	961	958	970	1 40	1002	0 52	948
20	961	965	965	968	975	1000	1010	984	975	974	965	964	975	11 20	1011	2 36	960
21	966	971	972	970	986	993	993	986	980	976	973	973	979	11 30	996	5 30	965
22	974	976	975	981	981	985	996	981	971	970	967	968	977	11 4	998	21 12	963
†23	973	973	976	973	977	982	992	981	980	980	971	975	978	11 4	994	2 48	968
†24	979	980	980	979	983	998	1002	982	970	971	975	976	981	11 20	1002	16 40	968
25	977	979	981	984	989	1006	1011	998	991	992	989	991	991	11 20	1012	0 8	977
26	989	985	990	983	997	1003	1014	1001	984	979	974	975	989	11 24	1015	20 40	972
27	980	982	983	983	1011	1029	1029	985	982	977	971	968	990	10 40	1036	21 40	966
28	978	982	973	977	981	999	998	984	982	980	977	977	982	10 39	1003	1 8	970
29	978	978	978	979	978	982	993	979	973	976	975	976	979	11 30	993	15 30	970
†30	977	980	982	982	986	994	994	987	989	982	979	982	985	10 48	1000	0 4	976
31	985	984	984	986	989	1008	1008	995	995	998	992	991	993	10 48	1013	4 30	983
Mean .	975	977	977	978	984	997	1002	985	978	972	970	972	980				
Mean† .	976	978	979	978	981	999	1003	988	982	980	977	976	984				

*See footnote on page 55.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

NOVEMBER. 36000γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	983	939	985	974	980	995	1009	1013	1004	1000	991	992	993	13 12	1017	6 40	964
2	991	989	987	995	1006	1027	994	957	931	953	955	956	977	9 36	1030	15 16	922
3	968	967	963	968	968	981	981	962	961	965	967	971	969	10 18	983	16 44	956
4	973	975	974	976	978	989	993	981	978	970	975	973	978	10 56	996	17 36	968
†5	977	979	980	979	985	993	1002	986	980	983	979	975	983	11 20	1004	21 12	973
6	977	977	979	983	995	1010	1011	989	983	988	984	977	988	11 4	1013	0 12	976
7	988	992	990	991	1002	1017	1016	1001	992	996	979	959	993	10 40	1023	22 4	958
8	974	977	989	985	1001	1020	1013	992	986	985	985	987	992	10 8	1020	0 4	974
9	988	989	990	990	1001	1013	1016	992	987	985	985	984	993	10 36	1019	21 28	981
†10	986	987	988	994	1007	1028	1025	1003	998	997	996	993	1001	10 40	1034	0 16	984
11	992	998	1001	1003	1022	1037	1033	1008	1000	999	992	992	1007	10 48	1043	0 54	985
12	993	996	997	999	1017	1032	1032	1017	1009	1005	994	969	1005	10 30	1039	23 32	958
13	966	933	985	982	1002	1026	1023	993	983	984	982	982	993	10 44	1033	0 4	966
14	975	979	981	981	1007	1024	1019	990	978	978	919	983	990	10 20	1026	2 32	971
†15	987	986	984	987	995	1013	1011	988	984	979	986	988	991	11 4	1016	17 20	979
16	988	990	991	994	1000	1014	1023	1001	998	990	987	985	997	11 20	1025	20 28	980
17	988	984	984	988	1003	1015	1012	995	990	986	989	991	994	11 8	1019	1 36	980
18	989	988	991	997	1016	1033	1028	1009	1001	999	1001	998	1005	10 40	1041	1 40	987
19	991	994	994	997	1012	1020	1014	997	996	996	993	991	1000	10 40	1020	0 4	991
†20	992	994	993	997	1009	1022	1018	1006	996	994	994	994	1001	10 30	1023	0 20	991
21	994	995	996	999	1017	1034	1033	1011	1001	1003	1001	998	1008	11 4	1038	22 10	992
22	1004	995	1001	1006	1014	1027	1023	1007	1002	996	995	996	1005	10 20	1030	0 20	985
23	996	987	980	973	985	996	999	985	987	983	978	985	986	10 52	1002	5 48	970
24	988	987	989	990	1005	1025	1022	1000	994	990	990	986	997	10 40	1030	21 0	985
†25	990	992	993	996	1016	1036	1036	1014	998	995	992	991	1004	11 20	1040	1 8	988
26	992	991	991	1000	1013	1037	1027	1013	1004	1001	989	982	1003	10 20	1039	21 30	980
27	983	985	985	1000	1020	1047	1066	1055	1012	995	975	991	1007	12 44	1071	23 28	963
28	964	968	975	984	990	1014	1016	984	982	981	972	978	985	10 40	1019	1 20	961
29	979	985	1002	1011	997	1009	1006	989	973	975	987	974	991	10 52	1017	18 20	969
30	981	983	995	994	1007	1013	1005	987	984	982	981	985	991	10 18	1021	16 48	976
Mean .	985	986	988	990	1002	1018	1017	997	989	988	985	984	994				
Mean† .	987	987	988	991	1002	1018	1018	999	991	990	989	988	996				

DECEMBER. 36000γ PLUS TABULAR QUANTITIES.

1	986	984	986	986	1002	1003	1007	1003	993	989	989	993	993	10 56	1008	1 32	983
†2	989	988	988	988	996	1013	1008	995	991	987	988	987	994	10 30	1019	18 20	986
3	989	992	993	994	1008	1017	1017	1005	995	994	991	990	999	10 40	1021	21 16	987
4	994	992	1000	1005	1023	1028	1034	1006	970	959	968	990	997	11 4	1043	18 30	955
5	983	982	983	986	999	1011	1001	991	991	987	985	975	989	9 50	1011	22 16	974
6	986	983	989	994	1003	1007	1005	1000	989	994	991	993	995	10 44	1009	1 20	981
†7	991	991	985	992	1010	1011	1005	997	993	995	994	990	996	10 44	1013	3 0	983
8	992	994	994	997	1014	1023	1006	991	987	997	1000	1002	1001	9 36	1029	15 30	986
9	1001	1004	1003	1003	1023	1038	1039	1022	1013	1005	980	965	1006	10 20	1041	21 20	961
10	971	970	974	990	1003	1016	1006	981	979	985	981	978	986	9 48	1017	0 30	967
11	982	979	982	987	1001	1013	1010	998	985	982	984	986	991	10 30	1015	0 56	978
12	989	990	992	996	1008	1025	1021	1007	993	990	991	990	999	10 36	1030	0 32	987
13	991	991	997	1006	1022	1032	1022	1014	987	977	991	992	1002	10 56	1034	17 0	975
14	989	985	990	998	1012	1021	1018	1012	1014	969	979	984	999	10 56	1032	18 56	962
15	991	991	992	997	1005	1021	1027	1017	1002	1001	992	996	1002	10 52	1031	0 28	986
16	990	994	990	1001	1003	1008	1003	991	988	994	994	991	996	11 4	1009	14 40	986
†17	993	996	995	998	1003	1009	1009	1004	1004	1002	1002	1000	1002	10 48	1013	0 0	993
18	999	998	998	1000	1010	1023	1030	1018	1009	1006	1001	996	1007	11 36	1032	22 12	996
19	1009	1006	1007	1008	1023	1041	1045	1034	1014	1001	992	995	1015	11 40	1048	19 56	991
20	999	997	1000	1000	1013	1018	1021	1013	1013	1005	1000	999	1007	11 0	1025	0 20	993
†21	996	996	999	999	1012	1018	1019	1020	1005	988	993	992	1003	11 28	1023	18 14	987
†22	994	997	997	1000	1012	1022	1016	1001	1004	999	997	998	1003	10 40	1024	0 4	994
23	997	997	996	1002	1020	1031	1028	1024	1018	1011	1007	997	1011	11 0	1031	3 0	995
24	985	977	991	999	1020	1038	1022	1019	987	961	968	984	996	10 18	1040	17 30	949
25	979	983	988	993	1010	1024	1022	1002	996	979	983	959	993	10 40	1027	22 16	956
26	971	985	992	995	1007	1013	1014	1017	967	973	957	965	988	13 24	1024	21 30	948
27	970	1002	981	991	999	1004	999	982	974	985	981	982	986	10 20	1005	15 8	960
28	994	993	988	992	994	1004	1008	1000	981	982	983	992	992	10 24	1008	16 32	974
29	977	981	981	987	995	1004	1009	1006	991	987	986	986	991	12 44	1010	1 0	971
30	989	986	993	994	1002	1012	1018	1010	1001	992	990	987	997	11 20	1022	21 4	981
31	991	992	990	990	1003	1003	1003	999	991	989	985	982	993	9 20	1008	22 40	980
Mean .	989	990	991	996	1008	1018	1016	1006	994	989	988	987	998				
Mean† .	993	994	993	995	1007	1015	1011	1003	1000	994	995	993	999				

*See footnote on page 55.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

JANUARY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	315	315	318	319	325	323	300	296	314	319	320	317	**315**	8 44	330	13 12	291
2	318	316	310	318	323	328	318	321	322	321	320	317	320	8 40	332	3 40	310
3	317	315	315	316	320	329	319	325	326	324	323	320	321	10 24	331	3 8	312
4	321	317	317	318	320	314	309	326	327	323	324	322	320	15 20	332	11 51	309
5	323	322	320	318	320	328	315	319	322	323	325	325	322	9 51	328	12 20	305
6	329	327	327	325	327	334	314	310	327	325	325	327	325	9 56	335	13 28	307
†7	329	330	327	327	329	327	324	317	318	326	325	325	325	8 52	332	14 48	314
†8	327	328	327	326	328	315	317	320	329	319	320	319	322	8 44	331	10 24	310
9	325	323	321	322	327	327	325	317	326	322	321	322	323	8 44	334	14 0	315
10	329	328	326	327	337	329	331	330	331	325	328	327	329	8 4	338	17 0	322
11	329	329	329	328	331	331	332	336	334	334	331	331	331	8 28	337	6 44	325
12	332	332	332	332	340	318	304	309	325	320	321	321	323	8 4	341	11 36	302
13	328	330	331	333	340	333	323	336	344	340	339	336	334	15 30	345	11 20	318
14	337	333	335	337	346	332	335	318	333	335	332	330	333	8 40	347	13 48	317
15	329	329	327	329	335	326	332	323	331	326	329	329	329	12 56	339	10 40	313
16	330	329	327	327	338	323	329	322	325	324	327	327	328	8 44	345	10 30	321
17	327	325	325	324	328	318	316	336	317	322	325	325	324	13 48	337	10 40	303
†18	320	318	316	315	322	320	311	317	322	321	322	322	319	9 12	330	11 40	309
†19	321	321	320	319	327	336	338	341	336	330	330	332	330	12 40	353	6 48	314
20	327	324	323	323	325	314	318	336	337	325	328	328	325	14 48	347	10 40	306
21	329	329	329	327	334	318	327	336	332	329	330	332	329	13 56	338	10 36	308
22	332	332	332	334	336	305	317	344	340	336	339	343	333	14 40	349	9 52	305
23	337	336	335	339	345	337	336	351	362	347	345	343	343	15 51	362	10 40	323
24	343	343	344	344	346	322	329	347	343	337	333	333	339	14 32	352	10 12	317
25	331	330	330	332	342	309	284	309	331	328	326	327	322	8 0	342	11 8	**270**
26	325	326	327	331	347	331	287	309	322	326	325	323	323	8 28	350	12 0	286
†27	319	321	321	325	329	327	309	327	324	325	324	323	323	9 0	333	11 48	307
28	326	327	326	329	335	326	314	313	321	326	325	324	324	9 0	336	12 0	313
29	328	329	330	333	335	331	325	328	335	335	335	335	331	17 24	338	12 36	323
30	337	335	335	335	344	346	339	338	335	337	338	337	338	10 24	350	2 12	327
31	338	340	339	339	353	344	342	362	356	347	349	347	**347**	14 20	**363**	10 44	329
Mean .	328	327	327	327	333	326	320	326	331	328	329	328	327				
Mean† .	323	324	322	322	327	325	320	325	326	324	324	324	324				

FEBRUARY. 17000 γ PLUS TABULAR QUANTITIES.

1	344	341	341	341	351	335	332	337	340	338	341	339	340	7 52	352	10 40	326
2	337	339	339	337	340	336	326	332	344	337	342	339	337	15 51	344	11 44	324
3	343	342	342	343	354	336	335	340	343	338	342	340	342	7 51	354	10 36	327
4	339	339	337	335	340	336	331	346	348	339	341	342	340	15 0	348	11 12	325
5	343	340	338	336	336	319	318	328	328	322	325	325	329	0 0	345	11 20	314
6	324	322	321	318	318	316	305	320	329	321	320	320	**319**	15 32	333	11 24	**304**
7	315	314	314	315	319	317	310	333	337	338	338	340	325	23 32	344	11 20	309
8	339	341	339	339	345	348	339	339	348	347	347	349	344	23 16	350	6 20	335
†9	347	348	348	348	356	349	332	342	354	352	352	354	349	8 24	357	11 48	332
10	358	359	358	361	367	367	348	356	364	363	365	369	362	22 24	372	12 36	347
11	374	370	376	372	379	372	365	369	376	377	380	381	375	19 0	384	11 32	364
†12	382	382	382	383	389	380	370	371	379	380	380	379	**379**	7 44	**390**	12 28	366
†13	379	377	377	377	383	388	375	382	379	377	380	380	379	9 31	389	16 36	373
14	379	377	376	374	379	361	357	374	376	369	376	375	373	8 20	380	11 0	354
15	376	375	374	372	377	369	357	366	371	365	365	365	369	8 36	379	11 44	357
16	366	363	362	361	362	353	351	356	367	365	364	368	362	16 24	370	11 12	349
17	369	368	367	371	377	348	341	349	360	353	355	357	359	7 51	377	11 51	341
18	359	356	355	355	359	360	359	363	363	358	360	361	359	13 32	367	11 8	348
19	362	360	359	360	362	352	348	356	364	357	361	360	358	15 51	364	11 24	346
20	357	356	354	349	351	349	341	353	348	348	357	358	352	23 40	360	12 12	339
†21	354	354	352	354	358	353	350	369	363	358	362	363	358	13 36	369	11 20	345
22	362	361	358	358	360	351	343	362	358	356	358	357	357	0 0	362	11 28	342
†23	353	353	353	353	354	344	336	342	347	353	356	356	350	23 48	359	11 8	335
24	356	358	358	359	366	359	358	357	363	365	367	367	362	22 40	368	0 0	356
25	369	369	367	367	371	371	369	370	364	373	375	375	370	8 28	385	11 8	362
26	377	379	369	368	367	365	368	380	379	379	375	373	373	14 40	387	10 40	357
27	373	375	372	373	375	368	372	379	375	366	372	364	372	14 0	380	11 0	363
28	367	363	357	357	355	346	347	352	353	351	351	351	354	0 0	367	10 28	341
Mean .	357	356	355	355	359	352	346	354	358	355	357	357	355				
Mean† .	363	363	362	363	368	363	353	361	364	364	366	366	363				

*The daily mean ordinates derived from 24 hourly tabulations of V. F. magnotograms and corrected for the progressive change by 1/48 of the difference between the ordinates corresponding to the initial and the terminal hours are next converted into C. G. S. unit by means of the scale co efficient for 1 cm. of ordinate on photographic paper and finally these converted ordinates added to the adopted base-line values give the absolute values of the daily means of vertical force.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time *(vide* Introduction, page 4).

BI-HOURLY VALUES OF VERTICAL FORCE, 1923.

MARCH. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	351	349	351	345	346	324	318	334	337	332	336	336	338	4 20	352	11 0	316
2	345	343	343	343	343	330	318	336	347	337	342	343	339	15 40	348	12 0	317
3	346	344	345	345	349	324	326	349	351	338	343	345	342	15 0	353	10 36	317
4	349	350	350	352	354	343	345	361	364	354	358	359	353	15 20	366	11 0	337
5	362	359	359	359	356	339	342	357	356	347	350	352	353	6 20	365	10 16	337
6	354	353	350	350	357	342	330	343	353	342	344	346	347	7 48	359	12 0	329
7	349	348	348	348	353	334	325	343	353	352	357	357	348	23 16	363	11 44	324
†8	363	364	363	364	358	342	343	359	366	362	362	362	359	15 24	366	11 0	340
†9	364	365	364	366	372	354	353	362	366	362	366	366	364	8 0	373	10 32	346
†10	368	368	367	367	372	369	361	369	365	363	365	365	367	8 48	375	12 12	360
†11	364	363	362	362	368	361	353	366	363	353	357	357	360	7 40	370	11 48	353
12	356	357	356	356	362	356	345	362	364	354	357	357	357	14 40	367	11 32	344
13	350	349	348	347	358	342	331	347	353	343	341	343	347	7 44	359	11 51	331
14	339	339	338	340	348	320	314	346	344	332	335	336	335	7 28	350	10 56	302
15	337	335	334	336	333	319	329	344	355	352	353	356	341	23 56	358	9 51	319
16	354	353	355	357	363	335	329	349	353	345	347	350	349	7 32	365	11 16	326
17	346	343	345	349	349	342	327	348	362	355	357	361	340	23 32	363	11 40	326
18	359	357	359	359	367	351	334	362	375	365	363	365	360	15 51	375	11 52	331
19	363	362	361	363	368	351	337	360	369	360	360	362	360	7 0	372	11 28	336
20	354	352	352	355	363	339	327	352	361	352	356	359	352	7 32	364	11 28	323
21	357	355	356	359	360	333	327	349	363	359	357	359	353	7 0	363	11 0	325
22	355	353	352	356	361	345	339	353	358	358	357	358	354	7 52	363	11 24	337
†23	357	355	355	356	356	355	338	356	361	359	355	356	355	14 40	362	11 24	335
24	355	354	353	355	356	348	337	361	367	354	362	365	356	15 0	372	11 16	334
25	365	373	369	371	357	344	351	360	367	362	359	363	361	2 0	374	9 51	344
26	364	360	356	357	354	353	347	363	360	356	353	357	357	14 40	368	11 0	342
27	357	356	353	354	353	337	336	357	355	353	354	354	351	14 16	360	11 12	331
28	354	355	353	355	348	342	340	359	359	354	356	357	353	15 4	361	11 20	336
29	358	358	358	359	358	333	325	345	352	346	346	348	348	6 40	365	11 36	321
30	343	345	345	347	345	340	331	360	351	342	350	353	346	14 4	362	11 28	327
31	353	353	353	353	353	343	334	357	357	351	351	353	351	14 24	363	11 20	332
Mean .	355	354	353	354	356	341	335	354	358	351	353	354	351				
Mean† .	363	363	362	363	365	356	349	362	364	360	361	361	361				

APRIL. 17000 γ PLUS TABULAR QUANTITIES.

1	354	353	352	354	351	333	327	348	354	346	352	354	348	23 40	355	11 28	322
†2	354	354	352	252	352	341	329	352	359	353	354	356	351	15 0	359	11 16	324
3	354	354	353	352	359	342	335	356	358	351	354	356	352	7 36	361	11 28	329
4	353	353	353	357	358	344	334	353	360	358	357	358	353	16 0	361	11 16	328
†5	359	358	357	359	360	340	337	350	350	359	353	356	353	7 0	365	11 0	334
6	357	355	353	354	364	349	344	356	368	363	364	368	359	23 40	369	11 20	339
7	364	364	363	368	364	355	337	349	361	364	365	368	360	23 44	371	11 51	337
8	368	368	368	370	366	364	356	372	375	364	366	368	367	15 40	377	11 28	354
9	368	368	368	369	364	349	341	350	368	368	368	367	362	16 24	370	11 40	340
10	363	362	363	366	356	344	333	352	361	357	363	363	357	6 12	368	11 0	333
11	361	360	358	357	363	340	340	354	361	356	355	358	355	7 24	367	10 40	336
12	359	359	357	360	357	341	339	356	360	361	362	362	357	23 30	369	10 52	335
13	366	368	364	366	360	351	346	366	373	363	364	362	362	15 40	373	11 0	344
14	363	361	362	360	363	333	334	348	362	355	358	359	355	6 44	372	10 36	328
15	358	358	357	361	361	352	352	363	365	365	363	365	360	14 44	368	10 0	351
16	364	364	362	364	364	350	345	354	363	362	360	364	360	7 0	369	12 16	342
†17	359	358	355	354	356	352	348	361	364	353	353	355	355	14 32	365	11 20	345
18	354	353	351	356	358	339	337	351	360	356	357	360	353	16 0	361	11 24	334
19	361	361	360	364	364	353	349	360	365	357	358	360	359	6 32	368	11 32	346
20	361	360	357	358	360	345	335	364	373	371	371	375	362	23 40	378	11 32	333
21	373	370	367	366	369	352	344	360	372	368	373	373	366	23 52	374	11 0	343
22	376	373	375	375	379	361	350	369	381	376	371	379	372	7 0	382	11 28	349
23	377	375	374	376	380	361	349	365	375	371	375	378	372	7 0	382	11 40	347
24	375	373	371	375	374	361	345	362	369	362	366	370	367	7 0	377	11 36	338
25	367	367	367	365	363	357	357	363	365	365	367	371	365	23 52	372	10 40	353
* †26	372	371	373	375	362	351	351	360	361	360	360	362	363	5 51	375	11 0	349
†27	364	363	363	367	363	351	347	357	359	361	363	365	361	6 32	371	11 0	346
28	363	363	364	365	374	349	351	360	371	366	365	367	364	7 44	376	10 0	348
29	365	365	365	370	363	346	349	362	367	366	367	369	363	5 48	373	9 51	346
30	366	365	364	366	366	349	351	363	363	359	364	365	361	6 52	373	10 36	345
Mean .	363	363	362	363	363	349	343	358	365	361	362	364	360				
Mean† .	361	361	360	362	359	347	342	356	359	357	357	359	357				

*See foot-note on page 61.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

MAY.

17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
†1	368	369	367	370	369	352	353	359	367	361	363	365	364	6 20	372	10 44	347
2	364	364	362	366	360	340	341	349	357	355	356	361	356	6 42	367	11 18	339
3	359	360	359	360	353	347	348	364	375	368	367	371	361	15 51	375	10 36	346
4	372	371	370	372	366	347	351	359	368	366	368	372	365	0 32	374	9 51	347
5	373	371	369	367	376	369	357	369	377	370	366	369	369	16 40	378	11 51	357
6	369	369	366	371	369	350	354	363	363	362	359	362	363	6 36	374	10 48	348
7	364	362	363	363	370	367	361	368	373	371	365	368	367	16 50	375	11 6	361
8	372	373	372	372	362	337	344	364	374	365	367	372	365	4 48	375	9 51	337
9	377	376	377	378	365	356	360	375	375	371	371	374	371	6 4	379	9 51	356
10	377	377	375	379	371	350	364	368	368	366	368	369	369	6 28	380	10 12	349
11	372	372	370	372	358	358	370	378	373	365	366	367	368	14 18	379	8 52	356
†12	367	366	365	369	358	340	352	367	367	361	359	361	361	5 51	369	9 38	339
†13	363	364	364	369	359	343	341	365	367	368	368	371	363	14 50	373	10 52	338
14	374	375	375	380	373	349	362	369	381	374	372	374	371	15 51	381	9 52	348
15	377	375	375	378	368	346	351	368	379	373	373	375	370	15 51	379	10 48	342
16	377	376	375	380	367	357	358	367	369	359	360	364	367	5 56	381	9 40	355
17	363	363	366	370	356	330	333	344	363	361	366	369	357	5 32	371	10 38	327
18	369	366	368	374	358	336	333	338	358	363	362	364	356	6 4	375	12 34	332
19	363	363	361	367	361	339	330	357	368	363	359	361	358	15 34	368	11 30	330
20	361	360	359	365	367	349	344	353	365	361	357	361	358	6 40	369	11 32	343
21	360	359	357	361	361	340	332	350	357	354	354	356	354	6 32	366	11 48	332
†22	356	353	353	357	356	321	325	347	367	362	362	366	352	15 51	367	11 0	318
23	360	360	361	365	346	334	343	356	365	360	360	362	356	5 28	366	10 28	333
†24	361	359	359	366	359	342	345	353	359	355	357	359	356	6 4	367	10 16	341
25	360	358	359	365	354	344	352	360	360	358	360	364	358	5 40	365	8 52	341
26	364	362	362	367	362	350	348	358	369	367	364	366	362	16 32	370	10 32	345
27	367	367	367	373	363	342	357	369	373	366	367	370	365	5 51	373	9 24	342
28	368	369	369	377	360	340	349	368	379	377	375	375	368	15 51	379	9 44	340
29	378	378	378	389	378	352	359	374	377	375	376	382	375	6 42	390	9 54	351
30	387	381	380	385	380	365	364	368	376	371	373	373	375	0 0	387	10 32	363
31	376	373	373	383	379	367	370	368	372	373	372	373	373	5 44	383	9 50	366
Mean .	368	367	367	371	364	347	350	362	369	365	365	367	364				
Mean† .	363	362	361	366	360	339	343	358	365	361	362	364	359				

JUNE.

17000 γ PLUS TABULAR QUANTITIES.

1	377	376	375	381	368	350	348	361	369	371	375	378	369	5 51	381	11 6	345
2	381	379	378	383	379	354	351	360	373	379	377	378	372	6 50	384	10 56	343
3	379	379	377	385	379	367	362	361	379	375	371	375	374	5 56	386	12 50	358
4	375	376	373	378	374	352	341	355	369	369	369	372	367	6 24	380	11 16	337
5	372	372	372	376	370	345	339	363	372	370	368	370	367	6 24	380	11 26	339
6	372	372	372	378	370	346	349	358	362	371	368	371	367	6 32	381	9 51	346
7	369	369	367	371	369	345	367	377	391	395	391	390	376	17 36	395	9 42	344
8	388	388	388	391	383	373	376	383	384	389	388	391	386	23 0	392	10 56	371
†9	394	393	393	400	393	365	370	385	392	387	385	387	386	5 54	401	10 50	355
†10	384	384	383	387	394	383	381	380	386	386	382	384	385	7 51	394	13 4	378
11	383	383	384	393	375	355	356	373	377	371	373	374	374	5 51	393	9 54	354
12	371	370	370	377	367	353	357	373	367	357	363	363	365	5 51	377	9 54	352
13	363	363	366	374	347	328	329	356	377	379	386	385	363	20 4	387	10 32	324
14	386	384	386	393	377	356	356	369	377	380	383	384	377	5 51	393	10 52	351
15	385	382	380	388	385	368	361	370	380	380	378	380	378	6 40	389	10 56	360
16	379	379	379	389	383	362	356	366	381	382	380	383	376	5 48	389	11 34	355
†17	385	384	385	392	379	355	350	371	391	387	386	389	380	5 51	392	11 4	347
†18	392	390	389	398	400	367	368	387	404	393	389	392	389	6 54	404	11 4	360
19	391	389	387	393	390	368	355	377	387	378	380	383	382	5 51	393	11 51	355
20	387	387	386	389	391	371	364	385	389	381	382	381	383	7 51	391	11 16	361
21	386	386	385	386	375	352	356	362	367	367	363	363	370	4 52	388	10 6	351
22	368	367	368	371	367	362	361	365	373	368	363	365	367	15 22	373	12 24	358
23	370	370	369	377	365	332	339	365	370	364	359	361	361	5 56	378	10 28	329
†24	366	365	365	371	367	345	334	352	361	361	360	362	359	7 0	372	11 38	333
25	365	366	365	370	363	360	352	359	362	363	363	362	362	5 51	370	10 58	352
26	362	363	364	372	357	346	357	365	365	361	359	360	360	5 51	372	9 50	346
27	354	354	354	360	350	331	336	357	367	371	371	377	357	23 40	379	10 32	330
28	377	377	377	389	367	340	345	367	381	378	380	383	372	5 51	389	10 44	329
29	382	382	382	388	375	359	363	383	394	384	380	382	379	15 51	394	10 46	357
30	381	380	381	388	373	354	352	369	383	377	380	387	376	5 51	388	10 56	349
Mean .	377	377	377	383	374	355	355	368	378	376	375	377	373				
Mean† .	384	383	383	389	386	363	361	375	387	383	381	383	380				

*See footnote on page 61.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

JULY.

17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡ 0	2	4	6	8	10	12	14	16	18	20	22	Mean.*	Maximum. Time.	Mag.	Minimum. Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	383	384	383	388	372	352	359	377	375	367	370	373	373	5 32	388	9 51	352
2	373	372	369	377	371	359	361	391	411	413	417	420	389	23 38	426	11 52	358
3	425	426	425	432	425	407	323	372	397	395	399	404	**402**	5 51	**432**	11 32	323
4	407	407	407	410	399	375	337	338	359	370	378	384	379	5 46	410	12 8	321
†5	389	389	389	394	393	397	393	391	395	395	393	395	392	17 14	398	14 50	387
6	387	389	390	394	390	374	371	379	386	385	384	385	385	5 48	394	11 56	370
7	395	392	393	395	397	385	372	372	375	389	387	389	386	7 51	397	14 46	369
8	391	393	390	393	391	370	368	372	384	385	380	382	383	7 4	394	11 4	366
9	387	385	382	385	378	363	351	362	372	369	366	368	371	0 0	387	11 26	351
10	367	367	365	370	357	359	353	349	347	360	360	363	359	6 8	371	14 50	345
11	367	364	365	366	359	349	342	357	361	355	353	355	357	0 30	368	11 28	341
12	360	360	359	360	351	337	340	346	348	353	353	353	**351**	5 4	361	9 58	336
13	354	354	353	358	352	341	356	364	375	377	373	377	362	16 52	378	9 36	339
†14	380	382	383	383	383	372	365	369	384	386	381	384	379	16 44	387	12 4	364
†15	385	385	386	391	387	381	367	382	392	383	381	385	383	15 51	392	11 30	367
16	387	386	386	389	386	378	363	378	386	387	386	389	384	17 8	390	11 48	363
17	395	393	393	393	395	388	391	384	387	391	389	391	390	7 4	397	11 0	384
18	392	392	390	387	391	377	359	357	379	384	381	387	381	6 24	393	13 12	354
19	389	387	385	387	390	378	368	358	377	376	371	372	377	7 16	390	14 4	357
20	376	374	373	377	379	364	351	364	371	370	371	371	370	7 46	379	10 50	350
†21	376	375	373	378	379	357	350	357	374	379	371	373	370	6 50	379	11 8	347
22	375	375	375	379	375	359	353	373	368	373	371	373	371	6 4	380	11 4	345
23	376	378	379	382	385	369	359	377	380	376	373	374	376	6 56	385	11 44	358
†24	374	374	374	379	373	366	371	379	374	369	368	370	372	5 51	379	9 48	366
25	368	367	369	374	371	355	353	370	384	378	376	378	371	15 44	385	11 28	350
26	380	380	380	385	373	364	371	383	390	384	381	384	379	15 42	391	8 52	361
27	382	383	384	391	378	371	384	378	375	384	381	384	381	5 48	391	9 46	370
28	387	387	387	391	389	389	386	387	395	392	389	389	389	16 48	398	12 40	379
29	393	390	391	399	389	379	369	385	388	391	386	389	387	5 51	399	11 22	368
30	391	391	393	399	389	371	381	394	402	393	387	390	390	16 40	404	10 36	369
31	392	392	391	397	392	383	357	366	374	373	368	372	378	6 4	399	11 51	357
Mean .	383	383	383	387	382	370	362	371	376	380	378	381	378				
Mean† .	381	381	381	385	383	375	369	376	384	382	379	381	379				

AUGUST.

17000 γ PLUS TABULAR QUANTITIES.

†1	372	373	374	380	380	370	354	361	389	380	370	374	372	15 51	389	12 34	349
2	378	376	376	382	378	360	350	368	376	380	374	375	373	17 34	380	11 32	350
3	379	381	378	384	385	373	363	378	382	376	374	380	378	7 4	386	12 16	362
4	386	384	382	386	377	360	363	381	377	381	379	379	378	5 50	387	9 36	359
5	379	381	381	387	377	370	369	383	382	373	376	377	378	5 51	387	8 56	368
6	377	379	379	385	375	375	377	383	380	375	377	378	378	5 44	385	9 4	374
7	373	374	374	382	365	345	349	365	368	368	368	373	366	5 50	383	10 34	342
8	370	371	371	378	364	357	373	383	390	385	392	393	378	23 38	395	8 52	352
9	394	394	393	400	398	382	382	402	395	398	394	395	394	6 36	402	11 12	376
10	396	396	395	402	393	383	387	396	399	396	394	400	**395**	6 40	403	10 55	381
11	395	393	394	399	391	379	382	396	401	393	392	395	392	15 8	403	8 58	377
12	395	395	393	397	392	376	356	376	398	395	388	391	388	16 24	401	11 38	356
13	390	389	391	395	395	385	377	393	389	391	387	389	389	7 10	397	11 42	375
14	386	385	381	387	377	339	354	367	371	376	375	377	373	6 24	389	10 4	338
15	378	378	378	380	377	369	367	380	388	382	377	383	378	15 32	388	11 0	363
16	384	384	382	390	384	373	377	381	380	375	375	378	380	6 12	391	9 58	372
17	383	384	382	388	374	357	362	370	375	377	375	379	376	5 51	388	9 50	355
†18	381	381	383	385	384	377	375	377	382	379	375	379	379	6 40	387	10 50	371
19	378	380	380	382	380	361	373	376	376	374	374	374	376	6 42	383	9 52	360
20	376	377	373	377	381	367	359	361	367	370	368	369	370	6 58	381	12 32	357
†21	370	370	368	372	366	357	363	368	364	361	363	363	**365**	5 51	372	10 36	354
22	364	365	364	371	359	337	357	375	382	374	379	384	369	23 44	386	9 48	**336**
23	383	385	385	392	379	371	369	396	386	380	386	388	383	13 50	397	11 20	367
24	390	391	391	399	384	365	374	388	399	386	388	392	388	15 40	400	9 44	365
25	395	395	395	405	387	351	374	396	391	385	393	395	388	5 58	**406**	9 40	349
26	398	398	400	404	396	377	385	393	401	396	395	397	395	6 12	405	10 8	376
27	396	395	394	403	393	375	386	402	400	389	392	396	393	5 51	403	9 48	374
†28	392	392	392	401	390	359	357	378	388	384	389	392	385	6 16	402	10 40	353
†29	386	386	385	394	385	370	363	379	386	385	384	386	382	6 36	396	11 12	362
30	387	387	386	389	392	363	361	380	388	378	375	378	380	7 4	396	10 24	359
31	380	379	378	382	382	359	358	373	382	376	376	379	375	6 52	388	10 38	354
Mean .	384	384	383	389	382	366	368	381	385	381	381	383	381				
Mean† .	380	380	380	386	381	367	362	373	382	378	376	379	377				

*See foot-note on page 61.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	379	377	379	382	377	361	363	372	380	373	375	377	375	6 36	386	11 0	357
2	375	377	377	383	375	343	360	379	377	372	372	375	372	6 30	384	9 48	342
3	374	374	372	378	373	349	361	376	378	368	368	372	370	6 54	382	10 6	348
†4	370	373	371	376	365	337	347	366	373	365	368	370	365	5 51	376	10 32	336
5	369	370	370	374	361	355	353	369	372	368	371	375	368	23 40	377	10 30	352
6	373	373	373	377	366	360	364	381	385	375	377	379	373	15 26	385	8 52	356
†7	375	375	378	385	377	352	352	373	379	371	376	379	373	6 48	387	10 30	351
†8	378	379	380	386	375	357	357	372	379	375	378	382	375	6 12	387	10 38	355
9	381	381	381	385	375	339	350	381	390	375	381	383	376	15 45	390	9 50	338
10	382	384	383	391	379	360	354	382	390	381	383	385	380	6 48	393	11 42	353
11	390	387	389	395	373	362	370	391	402	393	393	395	387	16 12	403	10 50	361
12	396	396	397	402	387	354	360	386	400	394	396	398	389	5 51	402	11 0	349
13	398	398	398	404	400	379	373	381	392	400	392	396	392	6 40	410	11 50	372
14	401	399	397	401	407	378	374	385	401	399	399	403	395	7 4	415	11 36	373
15	402	403	402	406	402	379	372	393	402	399	399	402	398	6 50	408	11 10	371
†16	406	406	406	411	401	376	378	401	413	401	403	404	401	15 40	413	10 52	371
17	411	411	409	411	416	383	369	397	413	402	406	409	403	7 12	418	11 41	369
18	417	419	417	420	424	408	402	405	413	414	415	418	415	7 6	425	12 34	400
19	413	413	411	414	423	400	376	383	392	388	388	390	398	7 10	424	12 40	372
$20	390	390	390	392	398	379	367	380	..	..	..	407	..	7 4	400	11 46	366
$21	..	..	..	405	..	386	..	403	408	..	..	411	..	..	..	..	..
$22	..	..	..	415	..	386	394	408	410	399	403	403	..	..	..	..	..
23	358	364	367	375	369	333	338	370	385	370	375	380	366	15 15	385	10 52	329
†24	380	379	380	382	357	349	358	384	390	379	382	384	376	15 42	390	9 8	343
25	385	385	385	388	377	375	376	393	401	387	390	393	386	15 38	401	8 54	369
26	392	391	392	394	393	377	373	388	397	393	394	397	390	6 56	398	11 40	373
27	400	398	396	397	410	376	377	406	409	398	397	398	396	7 26	414	10 16	364
28	400	397	395	398	399	383	383	398	399	393	393	393	394	6 38	403	10 36	376
29	394	394	391	394	381	365	368	385	387	381	384	387	384	6 44	398	10 28	359
30	389	389	389	390	379	365	362	377	381	384	382	385	381	6 12	393	11 0	359
Mean‖ .	389	389	388	393	386	365	366	384	392	385	387	389	384‖				
Mean† .	382	382	383	388	375	354	358	379	387	378	381	384	378				

OCTOBER. 17000 γ PLUS TABULAR QUANTITIES.

1	389	389	387	389	383	367	361	381	380	379	379	381	380	6 22	392	11 22	360
†2	383	384	383	385	373	356	361	384	382	377	376	377	377	6 40	387	10 36	355
†3	381	381	380	382	392	362	358	373	387	389	393	396	382	23 56	400	11 24	357
4	400	400	403	404	407	398	386	399	404	402	403	403	401	7 24	411	11 44	385
5	404	404	405	405	403	394	385	403	404	399	402	403	401	14 44	407	11 44	385
6	403	401	401	402	397	384	390	401	394	393	396	398	397	0 0	403	9 30	384
7	397	398	397	397	398	375	369	385	391	383	387	388	389	6 54	401	11 32	368
8	388	389	387	387	388	377	361	381	385	378	382	383	382	6 56	393	11 44	361
9	385	382	382	381	388	370	370	385	396	392	398	402	387	23 52	403	10 10	369
10	408	409	409	411	416	398	382	411	417	402	408	411	407	7 4	418	11 32	381
11	411	412	408	412	409	386	388	404	406	400	404	406	404	6 52	415	11 10	382
12	411	409	407	406	402	385	379	394	395	394	397	398	397	0 0	411	11 16	378
13	399	399	395	395	392	376	382	391	392	387	389	389	390	0 0	399	10 8	375
14	390	388	387	387	387	375	364	378	381	379	380	382	382	6 52	393	11 38	363
15	383	382	383	384	391	374	375	380	379	380	376	380	381	7 10	391	11 0	368
16	373	380	372	385	387	377	365	375	376	380	379	381	378	6 40	388	11 4	364
17	372	369	372	379	377	353	363	390	397	399	401	402	383	23 40	403	11 4	349
18	398	399	397	401	387	366	373	404	402	396	399	400	395	13 38	404	9 50	366
19	399	397	400	402	389	387	398	404	401	402	401	402	398	13 28	405	8 30	381
20	396	395	392	395	385	372	384	392	389	391	392	392	390	6 42	398	9 50	371
21	390	390	391	388	392	384	386	392	387	391	392	394	391	23 54	395	11 16	382
22	394	393	394	396	395	384	389	394	387	389	390	392	391	6 42	403	10 46	380
†23	387	388	388	390	394	374	377	388	388	383	383	383	385	6 52	395	10 16	369
†24	383	383	385	387	387	364	373	386	389	382	383	385	382	15 8	391	10 36	357
25	389	387	389	390	391	363	368	385	389	384	387	387	384	7 6	393	11 8	357
26	390	389	389	392	393	378	384	389	394	388	389	390	389	6 38	394	10 28	377
27	396	395	395	395	390	375	387	392	398	394	397	399	393	23 40	400	9 26	375
28	402	402	401	405	409	399	397	401	400	398	399	401	401	6 58	410	10 52	394
29	402	401	401	400	405	374	379	389	391	391	394	394	393	7 16	407	10 46	369
†30	398	399	398	400	391	377	383	391	396	393	395	394	392	5 51	400	10 36	371
31	397	396	397	397	395	357	372	383	389	386	385	385	386	6 56	401	9 50	357
Mean .	394	393	393	394	393	376	377	391	393	390	392	393	390				
Mean† .	386	387	387	389	388	367	370	384	388	385	386	387	384				

*See foot-note on page 61.

†Five international quiet days.

In taking the hourly and monthly means for the international quiet days in September the two locally selected quiet days (September 4 and 24) have been used instead of the two international quiet days (September 21 and 22).

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

$V.F. magnetograph was under adjustment; some of the readings for these dates are supplied from the eye observations of Eschenhagen variometer.

‖In deriving the hourly and monthly means for September the readings from 20th to 22nd have been rejected.

NOVEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours.‡												Mean.*	Maximum.		Minimum.	
	0	2	4	6	8	10	12	14	16	18	20	22		Time.	Mag.	Time.	Mag.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ
1	384	383	381	383	378	371	375	382	383	379	379	378	379	0 0	384	8 56	371
2	381	381	383	386	386	382	388	394	385	388	390	391	387	12 48	398	11 16	378
3	392	391	391	392	397	392	395	392	391	395	395	394	393	6 50	399	4 10	390
4	394	395	396	399	398	384	393	396	395	392	393	392	394	6 50	401	10 38	383
†5	390	389	390	392	389	382	379	378	384	382	384	383	384	6 38	393	11 0	375
6	382	382	383	385	386	376	382	393	396	401	404	405	391	23 56	406	9 40	376
7	409	409	410	411	413	402	403	414	407	413	412	413	409	7 12	415	10 52	400
8	408	408	408	406	400	396	399	410	402	407	407	407	405	13 28	410	8 56	394
9	404	404	404	406	413	407	413	413	403	406	405	405	407	12 52	416	16 12	401
†10	405	406	405	405	409	401	404	405	405	406	407	405	405	7 51	409	9 51	401
11	405	404	402	402	411	403	401	404	403	402	402	402	403	7 51	411	11 4	391
12	399	395	396	396	400	393	398	401	393	394	393	393	396	13 0	402	21 14	392
13	387	388	387	387	391	390	397	397	392	391	389	390	390	12 50	399	0 54	386
14	387	386	385	385	395	396	408	412	405	410	410	410	400	13 8	416	3 24	384
†15	411	412	412	412	417	414	412	410	400	407	409	410	410	7 51	417	15 36	399
16	411	411	413	412	416	416	417	406	402	407	407	406	410	8 54	418	15 14	402
17	407	407	408	410	416	412	422	416	413	411	413	414	413	11 38	422	0 0	407
18	417	416	417	418	422	420	424	420	421	421	420	418	419	12 11	425	1 48	416
19	421	420	418	419	419	406	411	415	411	414	414	414	415	0 0	421	10 56	400
†20	424	424	425	425	425	406	405	411	405	406	407	407	413	7 50	426	11 0	400
21	419	418	418	418	416	405	409	414	413	410	409	410	413	0 54	420	10 50	401
22	413	414	415	412	418	403	397	405	401	405	406	406	408	7 40	418	11 40	397
23	413	413	411	412	417	405	401	400	408	407	408	406	408	7 51	417	10 56	398
24	418	416	415	415	415	406	401	411	405	405	405	405	409	0 0	418	11 32	400
†25	407	406	406	405	406	395	388	396	395	396	396	396	399	0 0	407	12 8	387
26	399	398	397	397	397	385	381	389	393	387	388	388	391	0 0	399	10 48	378
27	392	390	390	388	392	392	382	377	381	382	384	385	386	8 52	394	13 51	377
28	385	383	384	387	397	395	391	388	400	403	405	408	395	23 46	409	1 51	383
29	406	406	407	407	416	415	414	417	424	423	420	420	415	16 56	426	3 4	405
30	419	417	417	417	418	409	414	424	421	419	419	421	418	13 14	424	9 51	409
Mean .	403	402	402	403	406	399	400	403	401	402	403	403	402				
Mean† .	407	407	407	407	409	399	397	400	398	399	400	400	402				

DECEMBER. 17000 γ PLUS TABULAR QUANTITIES.

1	415	414	416	418	416	416	418	427	426	419	417	416	418	13 51	427	10 38	409
†2	415	414	413	413	411	404	409	414	413	412	412	411	412	0 0	415	10 14	403
3	407	407	409	409	409	407	403	407	409	409	411	409	407	16 50	411	12 58	400
4	404	405	405	405	410	405	403	399	401	402	405	403	404	7 51	410	14 56	395
5	400	398	396	396	394	402	407	402	388	394	393	391	396	12 34	408	15 34	388
6	387	385	383	383	383	384	385	379	375	383	381	379	382	13 0	388	14 53	372
†7	378	379	376	377	374	374	384	380	368	378	378	378	377	12 32	387	15 25	367
8	377	374	375	373	372	377	381	380	373	385	383	383	378	17 51	385	7 8	371
9	383	383	383	382	386	393	399	393	389	393	393	393	389	11 40	399	6 32	379
10	393	393	391	389	390	404	413	409	394	400	400	400	398	12 52	417	6 22	384
11	403	403	401	401	407	410	409	405	397	406	407	405	405	8 56	411	15 4	393
12	408	407	407	408	408	410	410	408	404	408	406	404	407	12 52	412	15 6	399
13	407	405	405	404	407	411	413	419	409	405	401	401	407	13 51	419	21 40	400
14	401	401	399	399	399	393	391	403	403	399	397	397	399	15 0	406	11 51	391
15	403	401	401	400	402	402	403	403	403	399	399	397	401	9 12	405	21 40	396
16	397	396	394	395	398	403	400	397	396	396	395	392	396	9 40	403	23 20	391
†17	393	391	391	389	393	388	384	384	387	390	387	383	388	8 52	394	14 52	382
18	384	382	381	379	382	373	374	394	393	395	396	396	386	23 38	397	10 44	369
19	394	394	394	392	396	397	390	400	396	396	396	396	395	13 48	400	11 42	389
20	395	395	397	397	396	395	387	395	403	401	403	404	397	23 0	406	11 48	385
†21	404	405	407	408	410	410	407	418	416	411	410	410	410	14 16	419	0 0	404
†22	406	405	405	407	411	413	407	409	405	411	411	409	408	8 46	415	2 56	404
23	407	405	405	405	406	413	405	405	401	403	403	403	405	9 51	413	6 44	400
24	399	393	395	397	395	406	413	407	403	405	404	403	402	10 52	415	6 36	395
25	408	407	407	410	420	426	421	411	413	417	417	414	414	10 40	429	1 56	406
26	414	412	408	410	410	421	416	416	412	412	410	408	412	9 51	421	6 52	405
27	411	408	408	404	408	409	416	413	404	406	404	404	408	13 4	417	19 50	403
28	404	404	404	404	408	410	404	409	415	410	412	410	408	15 44	416	11 44	403
29	413	412	408	407	407	410	407	404	407	405	403	401	407	0 40	414	21 12	399
30	403	399	399	399	401	395	401	409	401	395	393	393	399	13 28	409	21 56	392
31	397	397	398	398	400	401	398	398	398	392	392	389	396	8 48	404	21 50	389
Mean .	400	399	399	399	400	402	402	403	400	401	401	399	400				
Mean† .	399	399	398	399	400	398	398	401	398	400	400	398	399				

*See foot-note on page 61.

†Five international quiet days.

‡The readings refer to 9 minutes before the full hour of local mean time corresponding to a full hour of the Greenwich mean time (*vide* Introduction, page 4).

At Colaba, a day is classed as (1) a quiet day, or a day of (2) small, (3) moderate, (4) great or (5) very great disturbance, the letters for distinguishing each class being C, S, M, G and VG respectively. For representing intermediate conditions of activitiy of the smaller period movements, sub-classifications Ca, Sa and Ma are used. Roughly speaking a storm having a range over 225 γ in the variation of the horizontal force during the first twenty-four hours is classed as " Very great ". It is great if the range is between 150 γ and 225 γ, moderate if the range is between 65 γ and 150 γ and small if the range is less than 65 γ. The range is however not the only criterion used in assigning the character of a storm. The oscillations in the magnetograms are duly taken into account in determining the class to which a particular storm should belong. During the year there was no storm, which could be classed as ' very great '. The following table gives a list of principal disturbances recorded during the year :—

PRINCIPAL MAGNETIC DISTURBANCES, 1923.

Date.	Civil time of beginning.	Duration in hours.	Horizontal force during storm.				Range.	Relative magnitude.	Remarks.
			Maximum.		Minimum.				
			Time.	Magnitude.	Time.	Magnitude.			
	H. M.		D. H. M.	γ	D. H. M.	γ	γ		
January 13	9 4	37	13 9 30	36992	14 0 38	36951	41	S	Commencement sudden.
„ 20	7 55	45	20 11 18	37021	21 21 42	36938	83	Sa	Do.
„ 29	7 0	42	29 12 4	37024	30 22 0	36943	81	Sa	Commencement gradual.
February 1	17 0	32	2 12 0	37004	1 21 50	36951	53	S	Do.
„ 3	14 0	38	3 14 4	36985	3 20 20	36933	52	S	Do.
„ 5	20 0	32	6 9 42	37015	6 1 22	36963	52	S	Do.
„ 7	13 0	40	7 13 32	36999	7 21 22	36929	70	S	Do.
„ 10	10 0	17	10 10 52	36995	10 17 56	36931	64	S	Do.
„ 17	13 0	40	18 11 40	37039	18 2 4	36956	83	Sa	Do.
„ 25	0 0	103	25 8 24	37038	25 17 58	36906	132	G	Do.
March 14	21 0	34	15 10 52	37027	15 20 36	36965	62	S	Do.
„ 24	10 0	87	24 10 20	37037	24 23 40	36854	183	G	Do.
April 10	10 38	65	10 10 48	37023	12 21 12	36943	80	Sa	Commencement sudden.
„ 20	14 28	98	21 10 48	37016	22 18 20	36942	74	Sa	Do.
May 3	10 0	30	3 10 28	37025	3 23 32	36969	56	S	Commencement gradual.
„ 17	2 8	80	17 10 30	37045	17 22 8	36927	118	M	Commencement sudden.
„ 29	12 0	43	29 12 28	37006	30 19 48	36929	77	Sa	Commencement gradual.
June 4	0 0	52	4 11 16	37022	5 16 20	36945	77	Sa	Commencement sudden.
„ 13	1 19	53	13 4 8	37032	13 20 14	36922	110	M	Do.
„ 21	1 0	28	21 10 12	37046	21 18 8	36965	81	Sa	Commencement gradual.
„ 30	2 0	31	30 10 32	37047	30 22 50	36879	168	G	Do.
July 6	7 0	46	6 13 8	37048	7 8 56	36952	96	Sa	Do.
„ 10	1 0	59	11 11 16	37033	11 1 54	36957	76	Sa	Do.
„ 18	2 0	37	18 11 24	37053	18 2 10	36983	70	Sa	Do.
„ 23	2 16	18	23 13 28	37025	13 19 40	36967	58	S	Commencement sudden.
August 2	23 0	42	3 11 4	37038	3 15 40	36952	86	Sa	Commencement gradual.
„ 6	8 40	31	7 10 36	37032	6 16 20	36973	59	S	Commencement sudden.
„ 13	1 52	27	13 10 52	37035	14 1 21	36982	53	Sa	Do.
„ 24	9 0	13	24 11 36	37047	24 16 36	36966	81	S	Commencement gradual.
September 9	20 0	32	10 3 20	37028	10 15 56	36967	61	S	Do.
„ 26	8 52	54	26 10 8	37035	27 22 34	36894	141	G	Commencement sudden.
October 14	17 0	129	15 11 0	37030	16 18 48	36896	134	G	Commencement gradual.
„ 27	2 0	24	27 10 40	37036	27 21 40	36966	70	S	Do.
„ 31	17 0	61	Nov. 2 9 36	37030	Nov. 2 15 16	36922	108	Sa	Do.
November 12	10 0	22	12 10 30	37039	12 23 32	36958	81	Sa	Do.
„ 22	16 0	16	22 16 10	37007	23 5 48	36970	37	S	Do.
„ 27	5 29	73	27 12 44	37071	28 1 20	36961	110	Sa	Commencement sudden.
December 4	11 0	38	4 11 4	37043	4 18 30	36955	88	S	Commencement gradual.
„ 8	1 0	55	9 10 20	37041	9 21 20	36961	80	S	Do.
„ 23	22 0	99	24 10 18	37040	26 21 30	36948	92	M	Do.

$\varphi = 18^{\circ}\ 53'\ 36''\ N$; $\lambda = 72^{\circ}\ 48'\ 54''\ E$; $h = 11$ *metres.* *Subsoil—Trap.*

Apparatus.—Omori-Ewing Horizontal Pendulum Seismograph (E.-W.)

	V	T_0	ϵ	$\frac{r}{T_0^2}$
AE	20	32	....	....

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (H) AE.	Remarks.
1923.		H. M. S.			
Jan. . .	No Seismic disturbance was recorded during the month				
Feb. 2nd	Pe	1 1 43	..	..	Maximum cannot be determined as the movements are very small.
„ 2nd	P	5 19 14	..	..	
	S	5 28 44	..	..	
	L	5 42 33	..	..	
	M	5 51 35	..	1135	
„ 3rd	P	16 13 25	..	..	
	S	16 23 50	..	..	
	L	16 40 47	..	..	
	M	16 43 44	..	4900	
„ 12th *	Pe	2 14 55	..	..	Maximum cannot be determined as the movements are very small.
„ 23rd	P	6 1 37	..	..	Do.
„ 24th	P	7 46 22	..	..	
	S	7 56 29	..	..	
	L	8 16 12	..	..	
	M	8 16 53	..	345	
Mar. 2nd	P	16 58 7	..	..	
	S	17 5 29	..	..	
	M	17 26 55	..	145	
„ 5th	P	13 27 43	..	..	Slight local shock probably due to blasting operation in the neighbourhood.
„ 7th	P	10 53 20	..	..	Do.
„ 16th	Pe	22 11 13	..	..	Maximum cannot be determined as the movements are very small.
„ 24th	P	12 46 3	..	..	
	S	12 50 56	..	..	
	L	12 54 52	..	..	
	M	12 56 42	..	825	
„ 28th *	e	4 17 42	..	..	
April 13th	P	15 51 41	..	..	
	M	16 12 33	..	185	
„ 19th	Pe	3 19 32	..	..	
	S	3 24 25	..	..	
	Me	3 39 0	..	30	
1923—*contd.* April 23rd	Pe	3 31 6	..	..	Maximum cannot be determined as the movements are very small.
„ 24th	P	22 6 21	..	..	Do.
	M	..	..	..	
May 4th	P	16 43 39	..	..	
	S	16 53 47	..	..	
	L	17 16 0	..	..	
	M	17 24 56	..	360	
„ 12th	P	1 27 52	..	..	
	S	1 34 5	..	..	
	L	1 41 56	..	..	
	Me	1 44 0	..	30	
„ 23rd	Pe	22 49 25	..	..	
	S	22 58 20	..	..	
	L	23 19 13	..	..	
	M	23 15 19	..	40	
„ 24th	Fe	0 29 22	..	..	
„ 25th	P	22 26 34	..	..	
	S	22 30 27	..	..	
	L	22 34 16	..	..	
	Me	22 35 0	..	..	
	Fe	23 4 4	..	25	
„ 28th	P	1 31 37	..	..	
	S	1 36 14	..	..	
	L	1 38 57	..	..	
	M	1 40 12	..	135	
	Fe	2 36 32	..	..	
June 1st	P	17 35 9	..	..	
	S	17 43 45	..	..	
	L	17 56 7	..	..	
	M	18 3 58	..	65	
„ 1st	P	20 26 7	..	..	
	S	20 34 32	..	..	
	Me	20 35 0	..	20	
„ 22nd	P	6 49 55	..	..	
	S	6 54 28	..	..	
	L	6 58 44	..	..	
	M	7 0 13	..	1045	

*From Colaba No. 1 (E.-W.) Seismograph.

Apparatus—Milne-Shaw Seismograph (N.-S.).

Damping Ratio 20 · 6:1.

	V	T_0	ϵ	$\frac{r}{T_0^2}$
An ..	250	11·9	2·7	..

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (*h*) An.	Remarks.
1923—*contd.*		H. M. S.			
July 1st	P	8 5 42	..	..	
	S	8 9 8	..	..	
	L	8 10 55	..	..	
	M	8 11 28	..	..	
„ 2nd	P	2 47 16	..	..	
	S	2 50 16	..	..	
	L	2 52 2	..	..	
	M	3 1 29	..	..	
„ 13th	P	11 22 59	..	..	
	S	11 30 50	..	..	
	Le	11 42 39	..	..	
	M	11 46 39	..	24	
„ 22nd	P	14 30 20	..	..	
	S	14 40 36	..	..	
	L	15 0 43	..	..	
	M	15 3 52	..	39	
Aug. 10th	P	2 25 21	..	..	
	S	2 27 25	..	..	
	Le	2 28 40	..	..	
	M	2 29 4	..	..	
	Fe	2 34 55	..	..	
„ 10th	P	16 2 44	..	..	
	S	16 6 24	..	..	
	L	16 8 39	..	..	
	M	16 10 0	..	..	
	Fe	16 25 9	..	..	
„ 11th	P	1 10 6	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
	Fe	1 35 7	..	..	
„ 12th	P	10 22 37	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
	F	10 46 41	..	..	
1923—*contd.*		H. M. S.			
Sep. 1st	P	3 8 44	..	..	
	S	3 16 57	..	..	
	L	3 29 52	..	..	
„ 2nd	P	2 56 56	..	..	
	S	3 5 11	..	..	
	L	3 18 35	..	..	
„ 2nd	P	9 37 14	..	..	
	S	9 45 29	..	..	
	L	9 58 29	..	..	
„ 9th and 10th	P	22 7 56	..	..	
	S	22 11 3	..	..	
	Le	22 12 33	..	..	
	M	..	..	..	Maximum cannot be determined as the curve is very faint.
„ 10th	Fe	0 20 53	..	..	
„ 14th	P	8 14 26	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
	F	8 49 21	..	..	
„ 14th	P	13 9 32	..	..	Tremors.
	F	14 45 40	..	..	
„ 16th	P	16 45 50	..	..	
	S	16 54 35	..	..	
	M	17 4 46	..	..	
	Fe	18 8 35	..	..	
„ 17th	P	3 57 49	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
	F	4 27 34	..	..	
„ 17th	P	7 14 12	..	..	These times are as shown by Omori instrument. Milne-Shaw record is lost while changing photographic papers.
	S	7 18 57	..	..	
	L	7 22 29	..	..	
	M	7 23 31	..	410	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (*h*) An.	Remarks.
1923—*contd.*		H. M. S.			
Sep. 21st	Pe	20 13 51	..	..	Tremors.
	F	20 41 36	..	..	
„ 22nd	P	20 51 58	..	..	
	Se	20 55 58	..	..	
	L	20 59 10	..	..	
	M	21 2 30	..	..	
„ 23rd	P	3 23 29	..	..	
	S	3 26 55	..	..	
	L	3 28 31	..	..	
	M	3 32 46	..	..	
	Fe	3 47 31	..	..	
„ 26th	P	8 33 58	..	..	
	S	8 42 28	..	..	
	L	8 55 58	..	..	
	M	9 2 23	..	..	
	F	10 10 43	..	..	
„ 27th	Pe	7 10 24	..	..	
	S	7 17 54	..	..	
	L	7 27 54	..	..	
	Me	7 39 9	..	..	
„ 29th	Pe	7 7 58	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
„ 30th	P	1 33 16	..	..	
	S	1 43 41	..	..	
	M	2 15 0	..	..	
	Fe	4 22 41	..	..	
„ 30th	P	23 14 37	..	..	Tremors.
	Fe	23 31 37	..	..	
Oct. 1st	P	8 19 9	..	..	
	S	8 21 35	..	..	
	L	8 22 35	..	..	
	M	8 24 1	..	..	
	F	9 27 35	..	..	
„ 2nd	Pe	11 22 54	..	..	
	S	11 26 46	..	..	
	L	11 29 39	..	..	
	M	11 30 0	..	..	
	F	11 54 31	..	..	
„ 3rd	P	16 12 20	..	..	
	Se	16 19 27	..	..	
	L	16 29 57	..	..	
	Me	16 31 44	..	..	
	F	16 55 2	..	..	
1923—*contd.*		H. M. S.			
Oct. 7th*	P	3 39 43	..	..	
	S	3 47 53	..	..	
	L	4 2 44	..	..	
	M	4 4 13	..	..	
„ 10th	P	7 22 36	..	..	
	S	7 31 43	..	..	
	L	7 48 13	..	..	
	M	7 57 40	..	..	
„ 15th	P	7 49 11	..	..	
	S	8 0 52	..	..	
	M	8 28 7	..	30	
	F	9 43 37	..	..	
„ 20th	P	3 24 44	..	..	
	S	3 29 46	..	..	
	L	3 33 51	..	..	
	M	3 36 56	..	14	
„ 22nd	P	7 4 18	..	..	
	S	7 8 18	..	..	
	Le	7 11 16	..	..	
	M	7 11 21	..	..	
„ 28th	P	9 33 24	..	..	
	M	..	..	..	Maximum cannot be determined as the movements are very small.
Nov. 2nd	P	21 20 22	..	..	
	S	21 30 35	..	..	
	L	21 46 22	..	..	
	M	21 52 7	..	32	
„ 3rd	F	1 20 35	..	..	
„ 3rd	P	16 28 36	..	..	
	S	16 36 27	..	..	
	M	16 49 52	..	67	
	F	18 19 0	..	..	
„ 4th	P	0 16 51	..	..	
	S	0 27 9	..	..	
	M	0 27 13	..	23	
„ 4th	P	20 16 7	..	..	
	S	20 25 52	..	..	
	M	20 25 56	..	..	
	F	21 39 0	..	..	
„ 5th	P	21 37 12	..	..	
	S	21 45 4	..	..	
	L	21 56 59	..	..	
	M	22 4 10	..	77	
„ 6th	F	1 29 0	..	..	
„ 6th	From	18 19 0	..	..	
	To	19 19 0	..	..	Tremors.

* From Colaba No. 1 (E—W) Seismograph.

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (*h*) An.	Remarks.
1923—*contd.*		H. M. S.			
Nov. 6th—*contd.*	From	19 36 0	..	..	
	To	20 39 0	..	..	Tremors.
„ 12th	From	12 24 0	..	..	
	To	13 9 0	..	..	Tremors.
„ 17th	P	3 16 50	..	..	
	S	3 22 42	..	..	
	M	3 46 39	..	..	
	F	4 22 0	..	..	
„ 18th	P	21 37 57	..	..	
	S	21 44 42	..	..	
	L	21 52 47	..	..	
	M	21 56 50	..	31	
	F	23 7 0	..	..	
„ 19th	P	2 34 14	..	..	
	S	2 37 20	..	..	
	M	2 46 16	..	..	
	P	3 3 37	..	..	
„ 21st	Pe	13 34 22	..	..	
	M	13 41 58	..	..	
	F	14 9 0	..	..	
„ 22nd	From	7 30 0	..	..	
	To	7 33 0	..	..	Tremors.
„ 22nd	Pe	7 36 10	..	..	
	M	7 48 17	..	..	
„ 25th	P	17 12 9	..	..	
	S	17 13 54	..	..	
	M	17 31 13	..	..	
	F	18 14 0	..	..	
„ 26th	P	12 27 52	..	..	
	S	12 35 16	..	..	
	L	12 45 37	..	..	
	M	12 46 9	..	13	
	F	14 9 0	..	..	
„ 28th	P	16 12 36	..	..	
	S	16 16 6	..	..	
	M	16 16 9	..	..	
	L	16 18 6	..	..	
	F	16 29 0	..	..	
„ 29th	P	3 39 18	..	..	
	S	3 43 11	..	..	
	L	3 45 48	..	..	
	M	3 49 18	..	..	
	F	4 21 0	..	..	
Dec. 4th	Pe	9 47 38	..	..	
	S	9 48 57	..	..	
	M	9 48 14	..	..	
	F	10 1 0	..	..	
„ 5th	P	21 5 22	..	..	
	S	21 12 17	..	..	
	L	21 21 19	..	..	
	M	21 28 1	..	..	
„ 5th	P	22 44 23	..	..	
	S	22 51 42	..	..	
	L	23 4 12	..	..	
	M	23 6 5	..	..	
„ 6th	F	0 14 0	..	..	
„ 7th	From	16 32 0	..	..	
	To	16 54 0	..	..	Tremors.
„ 7th	From	23 53 0	..	..	
„ 8th	To	0 34 0	..	..	Tremors.
„ 8th	P	17 25 0	..	..	
	F	17 47 0	..	..	Tremors.
„ 8th	From	19 34 0	..	..	
	To	19 55 0	..	..	Tremors.
„ 10th	..	21 0 0	..	..	Do.
„ 11th	P	5 11 10	..	..	
	F	5 58 0	..	..	Tremors.
„ 14th	From	11 44 0	..	..	
	To	12 54 0	..	..	Tremors.
„ 15th	P	22 10 25	..	..	
	S	22 11 49	..	..	
	M	22 12 6	..	..	
	F	22 28 0	..	..	
„ 16th	P	11 54 55	..	..	
	S	11 56 25	..	..	
	L	11 57 51	..	..	
	M	11 58 0	..	..	
	F	12 29 0	..	..	
„ 20th	P	15 18 10	..	..	
	S	15 22 6	..	..	
	L	15 24 17	..	..	
	M	15 26 17	..	..	
	F	15 54 0	..	..	
„ 22nd	..	11 0 0	..	..	Tremors.
„ 27th	..	14 0 0	..	..	Do.
„ 28th	P	22 29 35	..	..	
	S	22 33 24	..	..	
	L	22 35 50	..	..	
	M	22 37 20	..	8	
	F	23 21 0	..	..	

Fourier analysis of diurnal and annual variations of horizontal force for the five international quiet days during 1923.

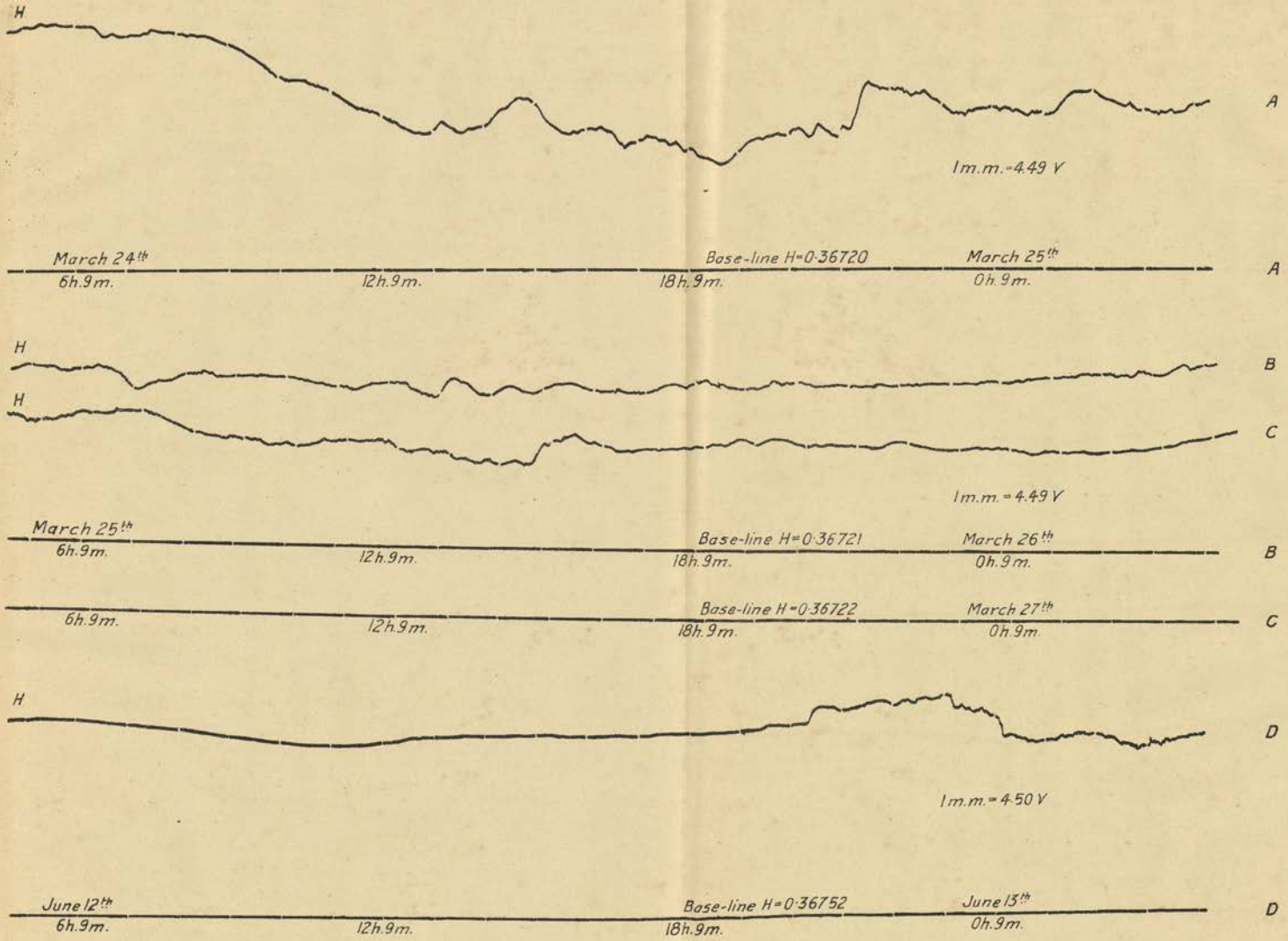
Diurnal variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from midnight to midnight (G. M. T.).

Annual variation : $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

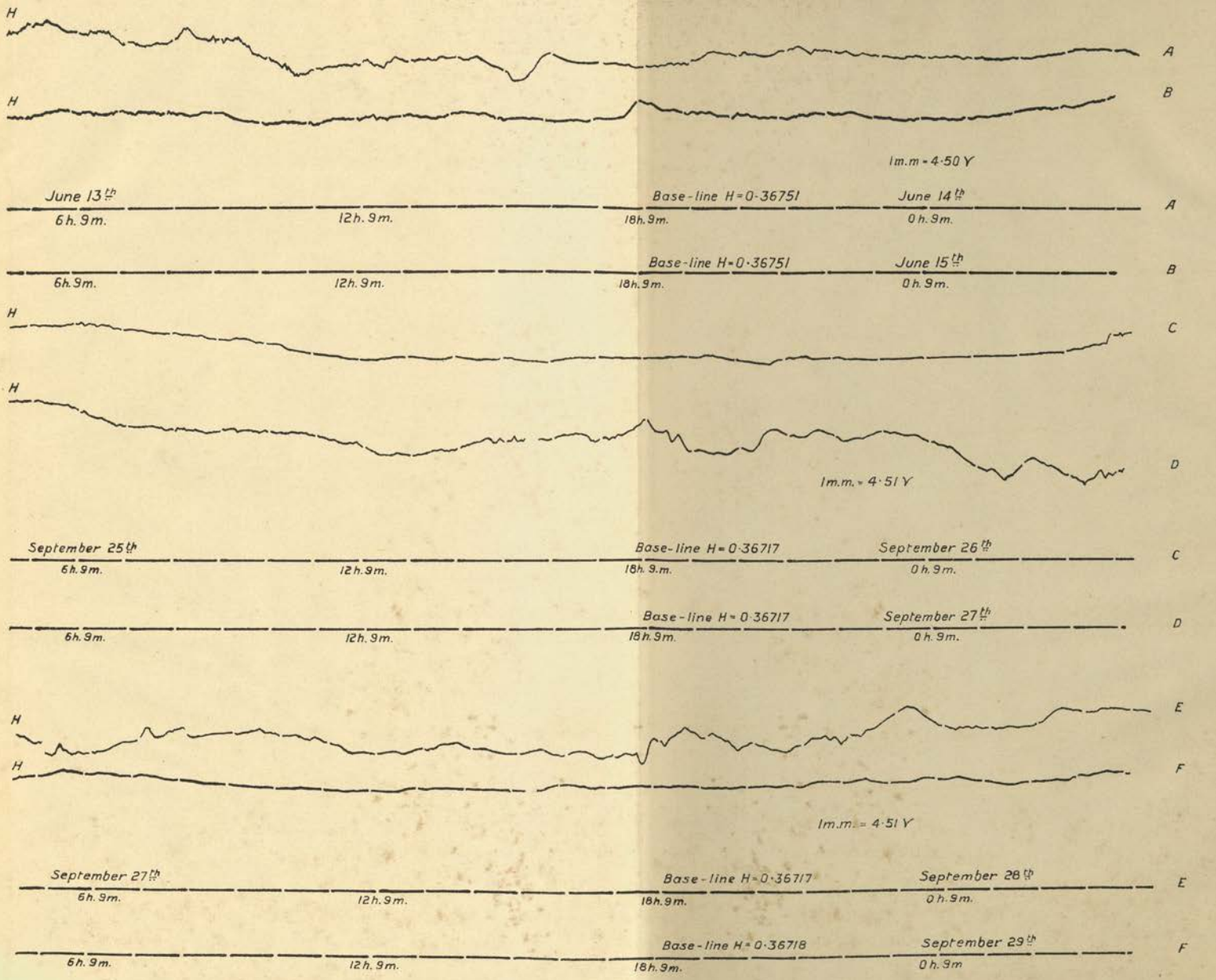
Quantity.	Diurnal Variation.												Annual Variation.
	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sep.	Oct.	Nov.	Dec.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1	12·1	11·9	17·3	16·6	13·6	19·4	20·4	14·1	5·7	9·8	14·1	9·6	16·4
c_2	5·4	10·1	7·4	8·0	6·9	10·3	9·8	7·4	4·8	6·1	7·3	4·5	11·9
c_3	2.0	2.2	3.9	3.5	1.9	2·8	2.1	1·8	3.6	3.7	3.6	2·0	8.5
c_4	1·0	0·6	1·1	1·6	0·5	0·4	0·4	0·3	1·5	2·3	1·5	0·7	5·1
c_1/c_2	2·2	1·2	2·3	2·1	2·0	1·9	2·1	1·9	1·2	1·6	1·9	2·1	1·4
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′
φ_1	354 22	354 15	345 41	354 21	344 45	349 46	350 10	340 42	350 23	355 6	2 41	2 2	141 34
φ_2	254 55	212 17	235 35	267 51	242 11	243 38	241 44	230 40	208 6	250 15	276 45	275 58	29 5
φ_3	175 54	182 51	143 49	191 53	160 31	135 52	150 49	146 24	138 7	177 13	184 17	220 42	204 31
φ_4	106 59	102 6	56 19	120 29	142 54	322 51	237 39	170 50	57 15	81 33	88 25	172 47	290 14

GIPD—M395Metro—20-9-28—250.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1923.

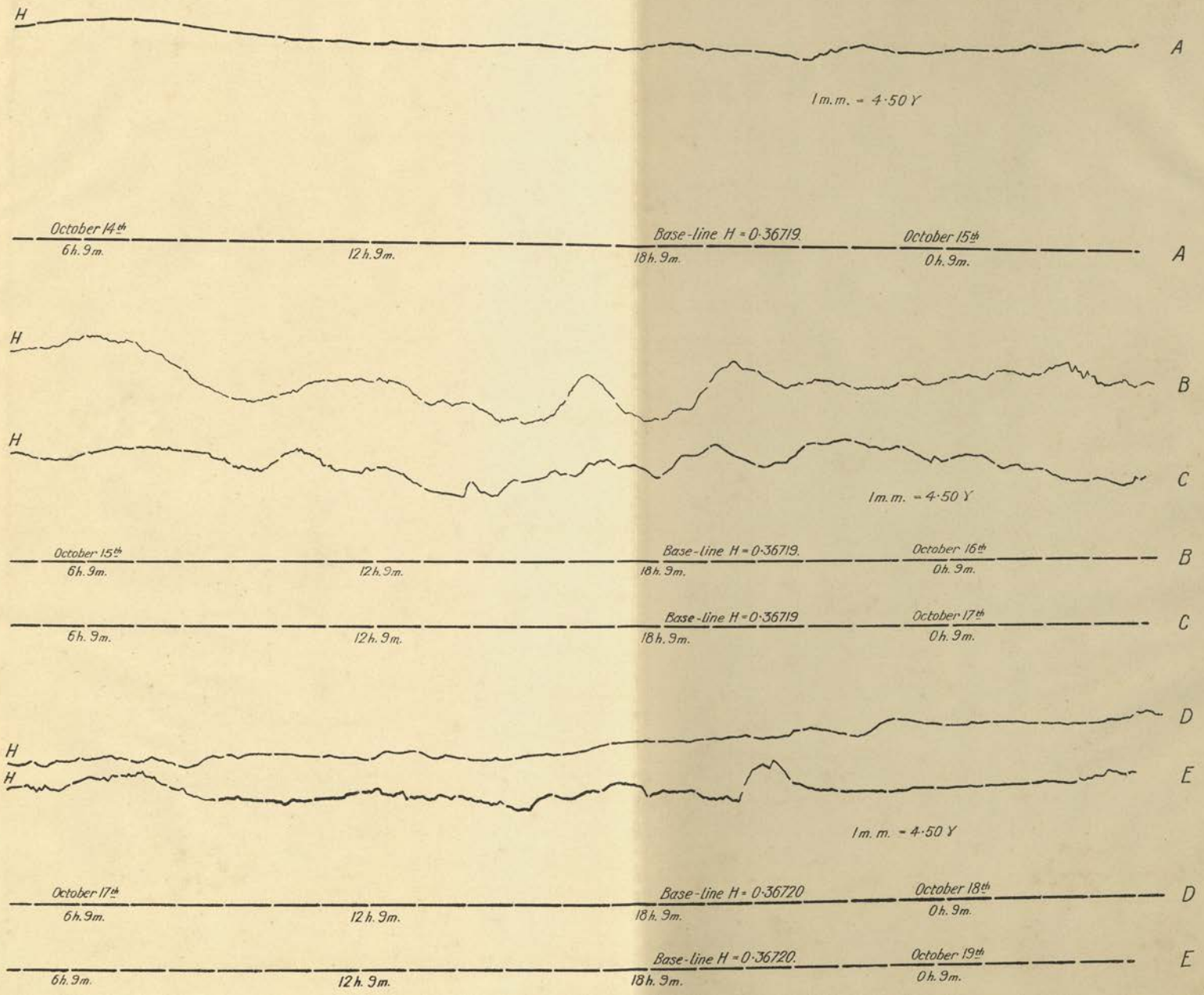


ALIBAG OBSERVATORY MAGNETOGRAMS, 1923.

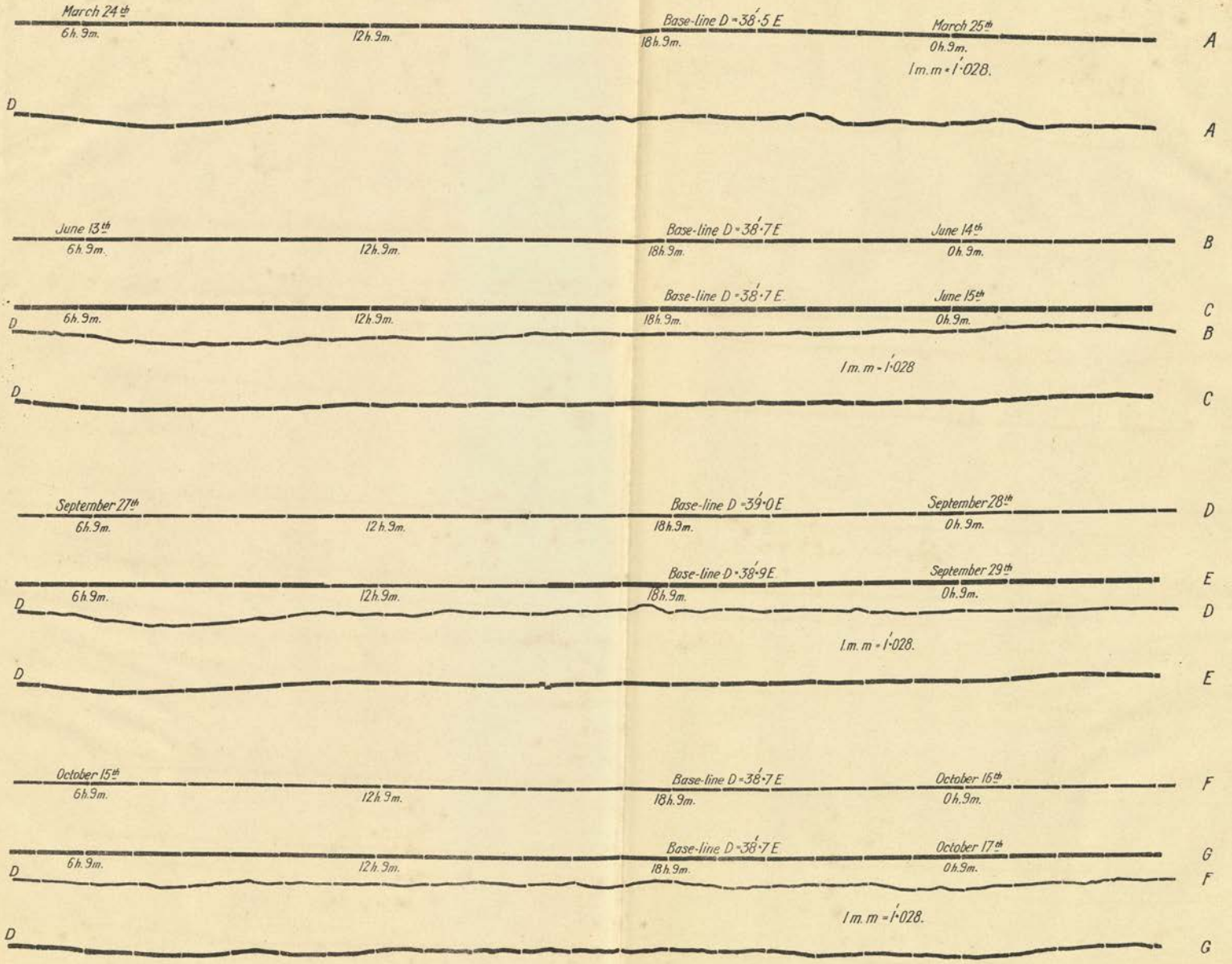


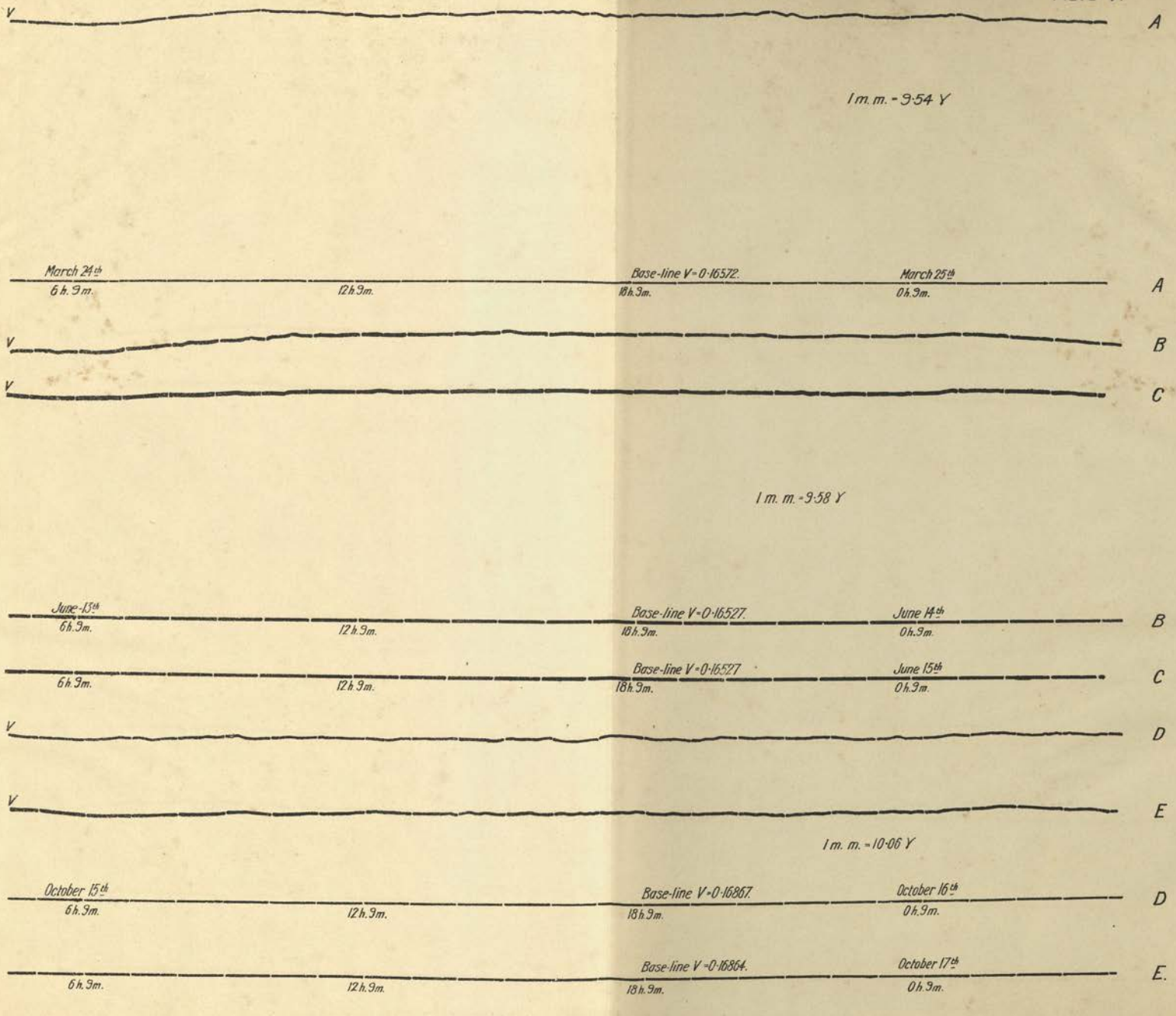
ALIBAG OBSERVATORY MAGNETOGRAMS, 1923

Plate III



ALIBAG OBSERVATORY MAGNETOGRAMS, 1923.




V
A
1 m. m. = 9·54 Y
March 24th
6 h. 9 m.
12 h. 9 m.
Base-line V = 0·16572.
18 h. 9 m.
March 25th
0 h. 9 m.
A
V
B
V
C
1 m. m. = 9·58 Y
June 13th
6 h. 9 m.
12 h. 9 m.
Base-line V = 0·16527.
18 h. 9 m.
June 14th
0 h. 9 m.
B
6 h. 9 m.
12 h. 9 m.
Base-line V = 0·16527
18 h. 9 m.
June 15th
0 h. 9 m.
C
V
D
V
E
1 m. m. = 10·06 Y
October 15th
6 h. 9 m.
12 h. 9 m.
Base-line V = 0·16867.
18 h. 9 m.
October 16th
0 h. 9 m.
D
6 h. 9 m.
12 h. 9 m.
Base-line V = 0·16864.
18 h. 9 m.
October 17th
0 h. 9 m.
E.

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